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Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association
Bbl	Barrels
BLS	Bureau of Labor Statistics, U.S. Department of Labor
Bcf	Billion Cubic Feet
BOM	Bureau of Mines, U.S. Department of the Interior
Btu	British Thermal Unit
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
EIA	Energy Information Administration, U.S. Department of Energy
FERC	Federal Energy Regulatory Commission
IOGCC	Interstate Oil and Gas Compact Commission
LNG	Liquefied Natural Gas
Mcf	Thousand Cubic Feet
MMBtu	Million British Thermal Units
MMcf	Million Cubic Feet
MMS	United States Minerals Management Service, U.S. Department of the Interior
NGL	Natural Gas Liquids
OCS	Outer Continental Shelf
STIFS	Short-Term Integrated Forecasting System
STEO	Short Term Energy Outlook
Tcf	Trillion Cubic Feet

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Revisions to Monthly Natural Gas Data

by Ann M. Ducca

Introduction

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly*. These data are preliminary when initially published. This article discusses the differences that occurred between the initial (first) monthly supply and disposition data for the United States published for 1994, 1995, and 1996 and the final monthly data published for those years. These data and the associated differences are shown in Tables SR1, SR2, and SR3.

National monthly data initially published come from one of three sources: (1) data reported on surveys of the natural gas industry, (2) analytical estimates, or (3) Short-Term Integrated Forecasting System (STIFS) model estimates. Beginning with the June 1996 issue of the *Natural Gas Monthly*, the EIA began publishing estimates of natural gas volumes from its STIFS model computations to provide more timely information about the gas industry. For production, total supply and disposition, and storage, STIFS estimates are published for the most current two months (the same month as the publication issue month and one month previous to the issue month). For example, in this, the July issue of the *Natural Gas Monthly*, the June and July estimates are STIFS estimates. For consumption by sector, STIFS estimates are published for the most current three months (the same month as the issue month and the two months previous to the issue month).

Analytical estimates are developed by EIA staff based on historical trends and data available from sources other than EIA surveys. (See the Appendix to this article for estimation methodologies.) Analytical estimates are provided when data reported from surveys cannot be obtained in a timely manner. Reported data are taken from EIA surveys of the natural gas industry except for import and export data which are taken from reports to the Office of Fossil Energy, U.S. Department of Energy.

As stated above, EIA began publishing STIFS estimates in June 1996. This article does not address the differences between the STIFS estimates and final monthly data (for the period from June 1996 through December 1996). EIA examines the utility of the STIFS estimates as part of its ongoing program of data quality. The STIFS model is updated as needed to improve methods of estimation.

All data discussed in this report are reported survey data or analytical estimates. Although the usefulness of initially reported survey data and analytical estimates cannot be judged solely on the basis of the quality of past estimates, the EIA is providing information about these differences to assist users in evaluating the usefulness of preliminary National data for 1997 and subsequent years.

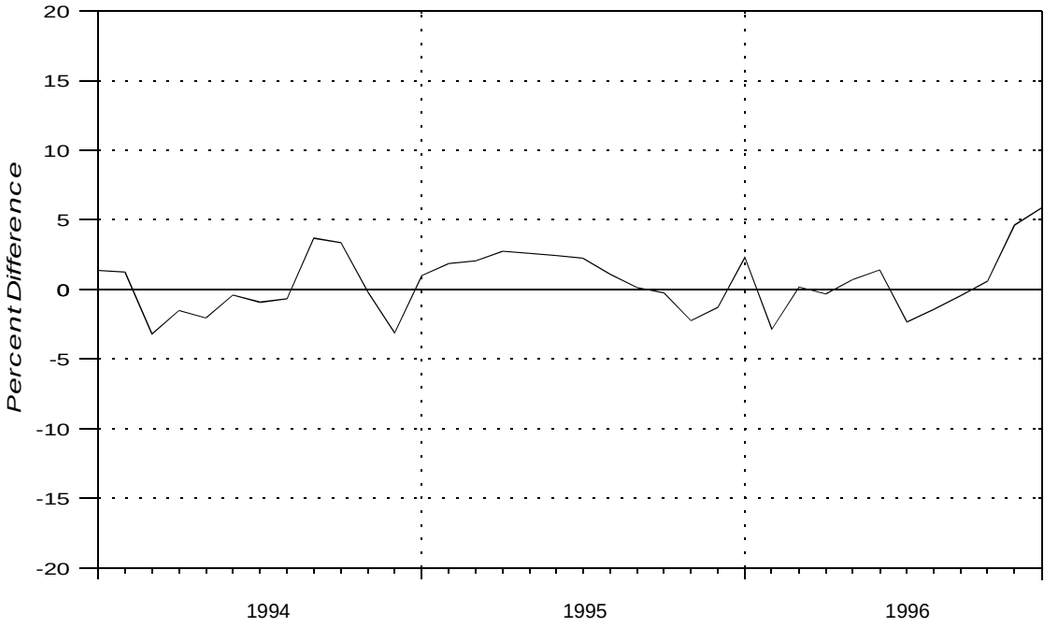
The monthly numbers discussed in this article are published in Tables 1, 2, 3, and 4 in each issue of the *Natural Gas Monthly*. If reporting or estimation errors are discovered, revisions to previous months of the current year are made only if they are significant. Data for months in prior years become final after publication of the *Natural Gas Annual.*

A detailed discussion of the reporting methodologies for all of the monthly data is given in the Appendix to this article which also includes Table SR4, a summary of the methodologies used to make analytical estimates and to report data from EIA surveys. This Appendix may also be helpful to users in evaluating the utility of the data. To maintain the quality of the monthly data, the EIA conducts programs of quality assurance for data reporting. EIA staff also continuously evaluate the estimation methodologies and recommend changes as needed to improve the estimates.

Results

Table SR1 shows the initial and final values for natural gas supply and disposition and the percentage difference between the values. Percentage differences are calculated by taking the difference between the initial value and the final value, dividing it by the final value, and multiplying by 100. Positive percentage differences indicate that the initial value is larger than the final value; negative ones mean the initial value is smaller than the final value. Figure SR1 is a graph of the percentage differences between final and initial marketed production values, and Figure SR2 is a graph for total consumption percentage differences. The percentage differences

Figure SR1. Percent Difference Between Initial and Final Monthly Values for Marketed Production, 1994-1996



Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

between the final and initial monthly estimates for consumption of natural gas by consumer sector are shown in Table SR2 and Figures SR3 through SR6. Differences between initial and final average prices are shown in Table SR3.

The major findings in comparing the differences between initial and final national monthly natural gas data are:

- Most differences between initial and final dry production volumes were 3 percent or smaller.
- Initial estimates for volumes of deliveries to residential consumers and consumption by electric utilities showed very little difference from final values for these end-use sectors. The differences were 2 percent or smaller for residential deliveries (except for a difference of 4 percent in January 1994) and less than one percent for electric utilities.
- Percentage differences between initial and final prices generally were small for the city gate (3 percent or less), residential (also 3 percent or less), and electric utility (2 percent or less) price series.
- When the data series in question has small volume amounts, the differences between initial and final data often result in large percentage differences.

A discussion of the findings by type of data follows.

Production

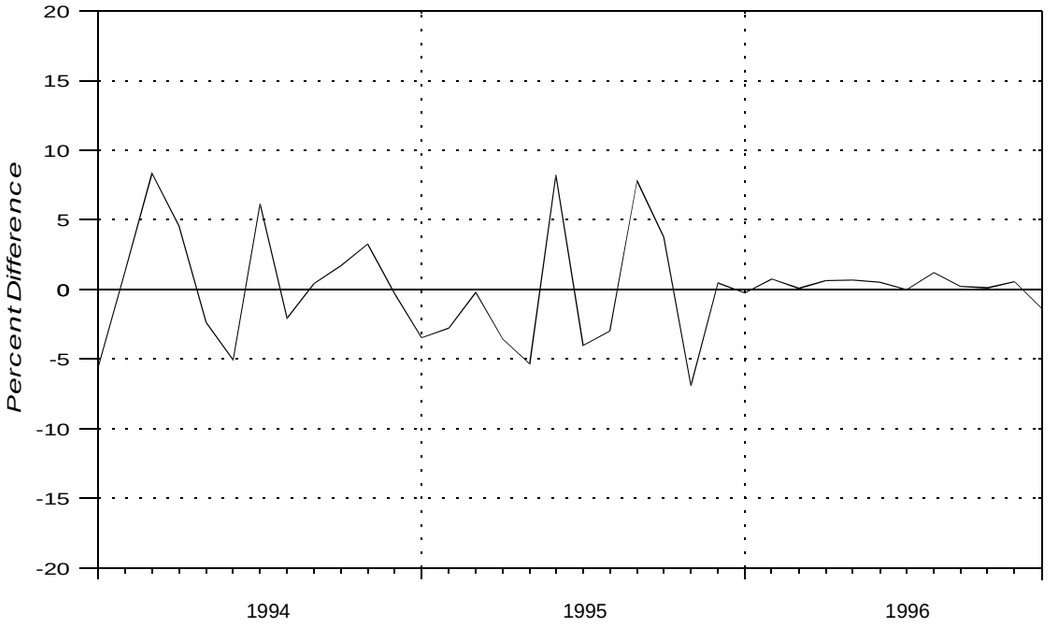
For 1994 through 1996, initial production estimates were analytical estimates.

Marketed Production. Marketed production is a broad indicator of market activity in the natural gas industry. As shown in Table SR1 and Figure SR1, the differences between initial estimates and final marketed production volumes in 1994, 1995, and 1996 were generally small. For all but three months the differences were plus or minus 3 percent or less.

Dry Gas Production. Monthly estimates for dry gas production show a pattern similar to that for marketed production since dry production estimates are primarily driven by the marketed production estimates. As

for marketed production, most of the differences were plus or minus 3 percent or less. Dry gas production is derived as marketed production minus extraction loss.

Figure SR2. Percent Difference Between Initial and Final Monthly Values for Total Consumption, 1994-1996



Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

Extraction Loss. The extraction loss estimates are derived by using the annual ratio of extraction loss to marketed production. Because the extraction loss volumes are small, the differences between initial and final volumes can result in large percentage differences.

Supplemental Gaseous Fuels. Supplemental gaseous fuels are the smallest component of the supply of natural gas, less than 1 percent of the total. Revisions to these data are usually very small volume amounts that often represent large percentage differences. The final volumes in 1994, 1995, and 1996 required either no adjustment or an adjustment of 1 to 2 billion cubic feet from the volumes initially reported.

Storage Withdrawals and Additions

For 1994 through 1996, storage data were taken from responses to the EIA survey, Form EIA-191, "Underground Gas Storage Report."

Storage withdrawals and additions illustrate the seasonal requirements that characterize the natural gas industry. During the heating season, November through March, the monthly withdrawals are large and can climb to 600 or more billion cubic feet. In the off-season, they usually drop to less than 100 billion cubic feet. Correspondingly, monthly additions are highest during the refill season, April through October. Revisions to off-season withdrawals (summer months) and off-season additions (winter months) generally tend to be small volume amounts that result in large percentage differences.

Over the 3-year period, the largest percentage differences between initial and final storage withdrawals occurred in the summer months. The percentage differences between initial and final additions to storage showed less variation, with a few large percentage differences in winter months.

Imports and Exports

For 1994 through 1996, import and export estimates were analytical estimates. For natural gas imports and

Table SR1. Initial Estimates and Revisions for Monthly Natural Gas Supply and Disposition in the United States, 1994-1996

(Volumes in Billion Cubic Feet)

Month	1994			1995			1996		
	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]
Marketed Production									
January	1,714	1,691	1.4	1,694	1,677	1.0	1,712	1,673	2.3
February	1,534	1,515	1.3	1,523	1,495	1.9	1,535	1,580	-2.8
March	1,642	1,696	-3.2	1,694	1,660	2.0	1,677	1,674	0.2
April	1,588	1,612	-1.5	1,648	1,604	2.7	1,645	1,650	-0.3
May	1,635	1,669	-2.0	1,692	1,649	2.6	1,691	1,679	0.7
June	1,586	1,592	-0.4	1,626	1,587	2.5	1,657	1,634	1.4
July	1,635	1,650	-0.9	1,676	1,639	2.3	1,633	1,672	-2.3
August	1,646	1,657	-0.7	1,646	1,628	1.1	1,647	1,671	-1.4
September	1,631	1,573	3.7	1,583	1,581	0.1	1,602	1,609	-0.4
October	1,689	1,634	3.4	1,606	1,610	-0.2	1,648	1,638	0.6
November	1,677	1,680	-0.2	1,620	1,657	-2.2	1,690	1,615	4.6
December	1,689	1,743	-3.1	1,697	1,719	-1.3	1,753	1,656	5.9
Extraction Loss									
January	80	76	5.3	79	78	1.3	80	81	-1.2
February	71	68	4.4	71	70	1.4	72	77	-6.5
March	77	76	1.3	79	77	2.6	78	81	-3.7
April	74	73	1.4	77	75	2.7	77	80	-3.8
May	76	75	1.3	79	77	2.6	79	81	-2.5
June	74	72	2.8	76	74	2.7	77	79	-2.5
July	76	74	2.7	78	76	2.6	76	81	-6.2
August	77	75	2.7	77	76	1.3	77	81	-4.9
September	76	71	7.0	74	74	0.0	75	78	-3.8
October	79	74	6.8	75	75	0.0	77	79	-2.5
November	78	76	2.6	75	77	-2.6	79	78	1.3
December	79	79	0.0	79	80	-1.3	82	80	2.5
Dry Production									
January	1,634	1,615	1.2	1,615	1,599	1.0	1,632	1,591	2.6
February	1,463	1,447	1.1	1,452	1,426	1.8	1,463	1,504	-2.7
March	1,565	1,620	-3.4	1,615	1,582	2.1	1,599	1,592	0.4
April	1,514	1,539	-1.6	1,571	1,530	2.7	1,568	1,570	-0.1
May	1,559	1,593	-2.1	1,613	1,572	2.6	1,612	1,598	0.9
June	1,512	1,520	-0.5	1,550	1,513	2.4	1,580	1,555	1.6
July	1,559	1,575	-1.0	1,598	1,563	2.2	1,557	1,591	-2.1
August	1,569	1,582	-0.8	1,569	1,552	1.1	1,570	1,590	-1.3
September	1,555	1,502	3.5	1,509	1,507	0.1	1,527	1,531	-0.3
October	1,610	1,560	3.2	1,531	1,535	-0.3	1,571	1,558	0.8
November	1,599	1,604	-0.3	1,545	1,580	-2.2	1,611	1,537	4.8
December	1,610	1,664	-3.2	1,618	1,639	-1.3	1,671	1,576	6.0
Withdrawals from Storage									
January	755	821	-8.0	614	658	-6.7	713	772	-7.6
February	544	586	-7.2	541	575	-5.9	530	558	-5.0
March	239	245	-2.4	315	332	-5.1	399	414	-3.6
April	68	68	0.0	122	127	-3.9	110	112	-1.8
May	23	25	-8.0	30	34	-11.8	38	45	-15.6
June	32	37	-13.5	37	40	-7.5	29	35	-17.1
July	22	26	-15.4	50	54	-7.4	45	49	-8.2
August	28	30	-6.7	80	86	-7.0	51	54	-5.6
September	22	21	4.8	27	29	-6.9	29	32	-9.4
October	51	54	-5.6	65	68	-4.4	68	73	-6.8
November	193	208	-7.2	346	374	-7.5	351	362	-3.0
December	423	458	-7.6	613	648	-5.4	461	473	-2.5
Supplemental Fuels									
January	14	13	7.7	13	12	8.3	14	12	16.7
February	12	10	20.0	12	10	20.0	12	11	9.1
March	11	10	10.0	10	10	0.0	12	11	9.1
April	10	9	11.1	9	7	28.6	11	9	22.2
May	10	8	25.0	10	8	25.0	8	6	33.3
June	9	8	12.5	10	8	25.0	10	8	25.0
July	10	8	25.0	10	8	25.0	10	8	25.0
August	9	8	12.5	10	8	25.0	9	8	12.5
September	10	8	25.0	9	7	28.6	9	8	12.5
October	10	9	11.1	10	9	11.1	10	9	11.1
November	11	10	10.0	12	10	20.0	12	10	20.0
December	13	12	8.3	13	12	8.3	12	10	20.0

See footnotes at end of table.

Table SR1. Initial Estimates and Revisions for Monthly Natural Gas Supply and Disposition in the United States, 1994-1996

(Volumes in Billion Cubic Feet) -- Continued

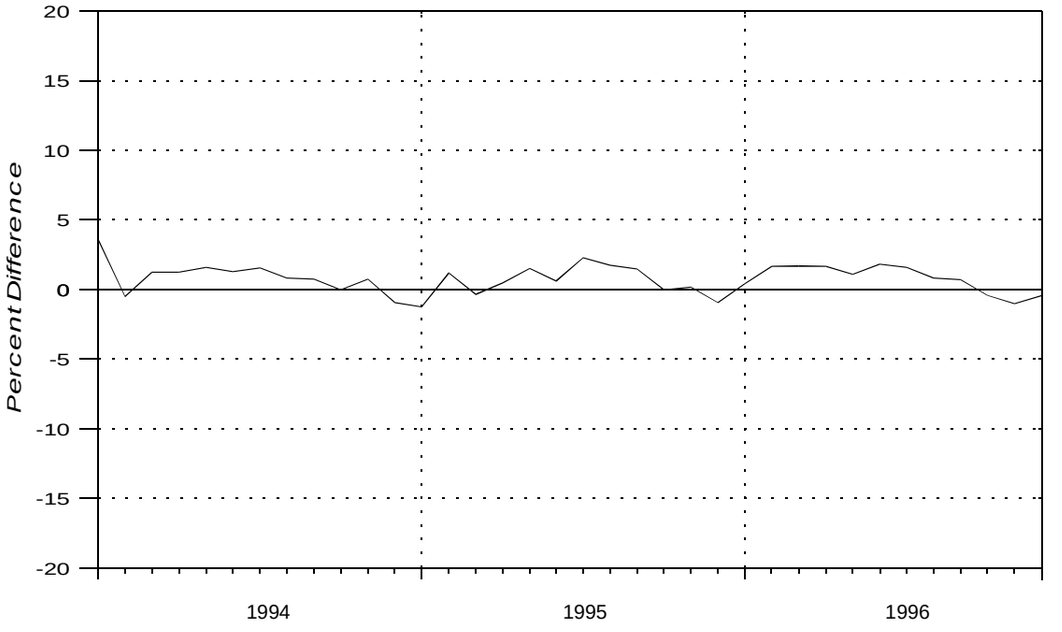
Month	1994			1995			1996		
	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]
Imports									
January	214	241	-11.2	224	253	-11.5	225	264	-14.8
February	162	199	-18.6	209	236	-11.4	236	234	0.9
March	221	223	-0.9	232	250	-7.2	248	242	2.5
April	219	212	3.3	225	232	-3.0	236	237	-0.4
May	206	206	0.0	248	228	8.8	223	252	-11.5
June	210	201	4.5	214	217	-1.4	221	227	-2.6
July	214	221	-3.2	234	223	4.9	230	237	-3.0
August	194	219	-11.4	235	237	-0.8	227	238	-4.6
September	185	210	-11.9	211	228	-7.5	224	238	-5.9
October	211	222	-5.0	220	236	-6.8	238	248	-4.0
November	207	226	-8.4	198	236	-16.1	233	252	-7.5
December	218	245	-11.0	233	264	-11.7	245	271	-9.6
Additions to Storage									
January	46	35	31.4	40	45	-11.1	45	49	-8.2
February	47	50	-6.0	43	44	-2.3	90	97	-7.2
March	105	106	-0.9	100	104	-3.8	75	80	-6.3
April	277	293	-5.5	165	178	-7.3	219	231	-5.2
May	414	440	-5.9	348	378	-7.9	367	385	-4.7
June	374	392	-4.6	390	419	-6.9	385	423	-9.0
July	398	422	-5.7	342	367	-6.8	401	431	-7.0
August	361	383	-5.7	276	298	-7.4	395	412	-4.1
September	335	356	-5.9	323	350	-7.7	393	411	-4.4
October	212	230	-7.8	257	279	-7.9	272	283	-3.9
November	95	105	-9.5	85	96	-11.5	88	90	-2.2
December	55	54	1.9	49	53	-7.5	85	86	-1.2
Exports									
January	9	11	-18.2	12	14	-14.3	10	14	-28.6
February	9	13	-30.8	13	13	0.0	9	13	-30.8
March	9	19	-52.6	13	15	-13.3	10	15	-33.3
April	8	9	-11.1	14	12	16.7	10	10	0.0
May	9	8	12.5	11	12	-8.3	9	8	12.5
June	11	13	-15.4	13	16	-18.8	12	12	0.0
July	11	11	0.0	13	15	-13.3	14	14	0.0
August	11	14	-21.4	16	14	14.3	17	17	0.0
September	14	14	0.0	14	11	27.3	13	11	18.2
October	14	13	7.7	12	12	0.0	11	12	-8.3
November	12	19	-36.8	14	13	7.7	11	14	-21.4
December	13	18	-27.8	10	8	25.0	12	13	-7.7
Total Consumption									
January	2,396	2,537	-5.6	2,320	2,403	-3.5	2,568	2,574	-0.2
February	2,344	2,314	1.3	2,146	2,207	-2.8	2,353	2,335	0.8
March	2,217	2,046	8.4	2,094	2,098	-0.2	2,211	2,209	0.1
April	1,713	1,638	4.6	1,717	1,780	-3.5	1,838	1,826	0.7
May	1,365	1,398	-2.4	1,483	1,567	-5.4	1,587	1,576	0.7
June	1,312	1,382	-5.1	1,510	1,395	8.2	1,462	1,454	0.6
July	1,462	1,377	6.2	1,437	1,497	-4.0	1,436	1,436	0.0
August	1,375	1,404	-2.1	1,502	1,548	-3.0	1,483	1,465	1.2
September	1,356	1,350	0.4	1,502	1,393	7.8	1,402	1,399	0.2
October	1,490	1,465	1.7	1,542	1,486	3.8	1,533	1,531	0.1
November	1,765	1,709	3.3	1,755	1,886	-6.9	1,907	1,896	0.6
December	2,082	2,088	-0.3	2,332	2,321	0.5	2,236	2,266	-1.3

[a] The percent change is the initial value minus the final value, divided by the final value, multiplied by 100.

Note: The monthly volumes may not sum to total volume because the initial estimates in the early months of the year may have been revised before the annual total is first published.

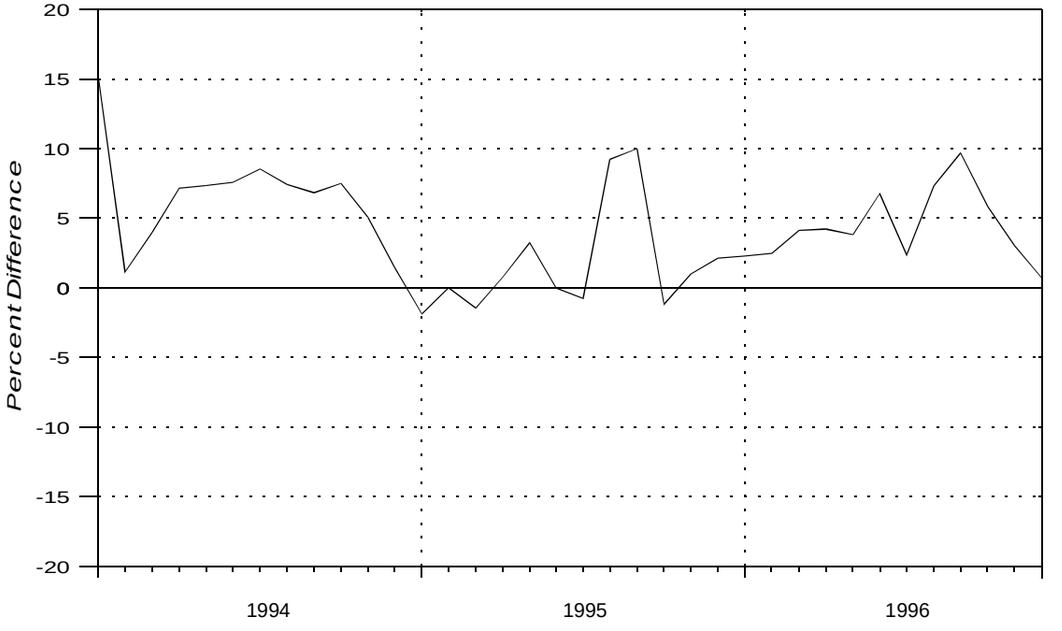
Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

Figure SR3. Percent Difference Between Initial and Final Monthly Values for Natural Gas Delivered to Residential Consumers, 1994-1996



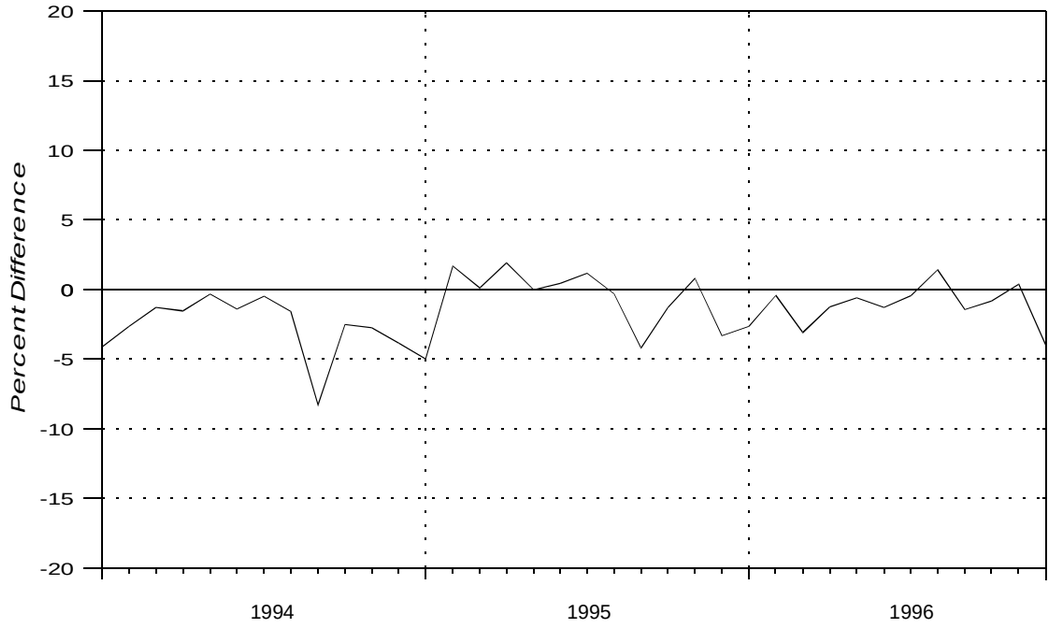
Source: Energy Information Administration, *Natural Gas Monthly,*1994 through 1996.

Figure SR4. Percent Difference Between Initial and Final Monthly Values for Natural Gas Delivered to Commercial Consumers, 1994-1996



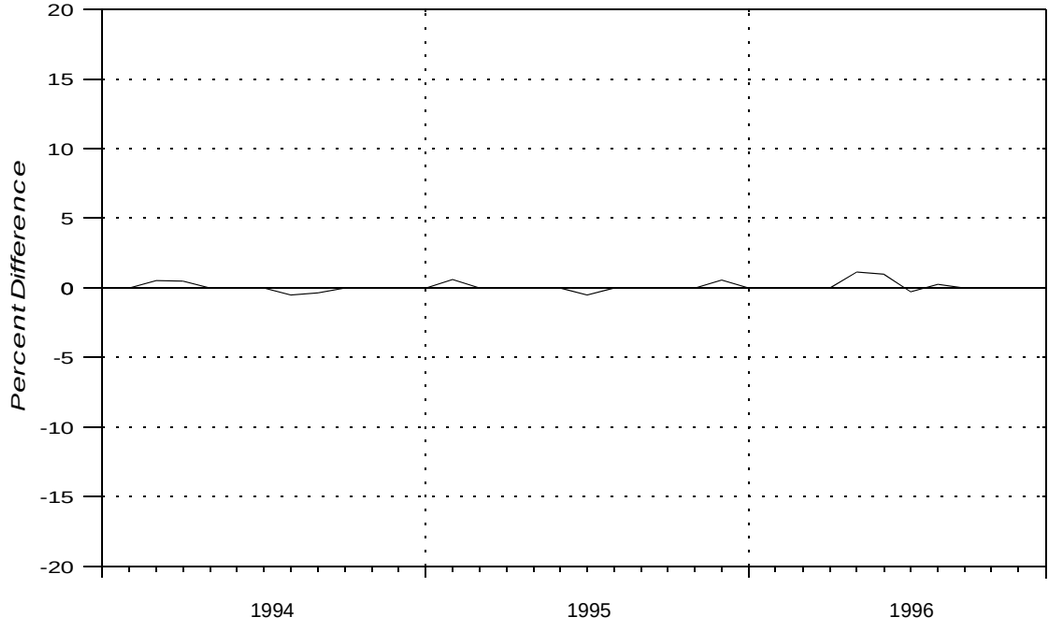
Source: Energy Information Administration, *Natural Gas Monthly,*1994 through 1996.

Figure SR5. Percent Difference Between Initial and Final Monthly Values for Natural Gas Delivered to Industrial Consumers, 1994-1996



Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

Figure SR6. Percent Difference Between Initial and Final Monthly Values for Natural Gas Delivered to Electric Utility Consumers, 1994-1996



Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

Table SR2. Initial Estimates and Revisions for Monthly Natural Gas Consumption in the United States, 1994-1996

(Volumes in Billion Cubic Feet)

Month	1994			1995			1996		
	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]
Lease and Plant Fuel									
January	107	96	11.5	106	105	1.0	107	106	0.9
February	96	86	11.6	95	94	1.1	96	101	-5.0
March	103	97	6.2	106	104	1.9	105	106	-0.9
April	99	92	7.6	103	100	3.0	104	104	0.0
May	102	95	7.4	106	103	2.9	106	106	0.0
June	99	90	10.0	102	99	3.0	104	102	2.0
July	102	93	9.7	103	101	2.0	102	105	-2.9
August	103	94	9.6	103	101	2.0	103	105	-1.9
September	102	90	13.3	99	99	0.0	100	102	-2.0
October	106	94	12.8	101	102	-1.0	103	104	-1.0
November	103	97	6.2	101	105	-3.8	106	103	2.9
December	106	100	6.0	107	109	-1.8	110	105	4.8
Pipeline Fuel									
January	79	85	-7.1	72	79	-8.9	85	85	0.0
February	69	78	-11.5	68	73	-6.8	78	77	1.3
March	62	68	-8.8	64	69	-7.2	73	72	1.4
April	50	54	-7.4	55	58	-5.2	61	59	3.4
May	43	46	-6.5	49	50	-2.0	52	50	4.0
June	42	45	-6.7	43	45	-4.4	48	46	4.3
July	42	45	-6.7	46	48	-4.2	47	46	2.2
August	43	46	-6.5	52	50	4.0	48	47	2.1
September	39	44	-11.4	46	45	2.2	45	45	0.0
October	45	48	-6.3	49	48	2.1	50	49	2.0
November	52	56	-7.1	63	61	3.3	62	62	0.0
December	63	70	-10.0	76	76	0.0	73	74	-1.4
Delivered to Consumers									
Residential									
January	987	953	3.6	806	816	-1.2	938	934	0.4
February	838	842	-0.5	763	754	1.2	845	831	1.7
March	639	631	1.3	598	600	-0.3	717	705	1.7
April	397	392	1.3	421	419	0.5	482	474	1.7
May	251	247	1.6	264	260	1.5	274	271	1.1
June	156	154	1.3	160	159	0.6	165	162	1.9
July	129	127	1.6	134	131	2.3	126	124	1.6
August	123	122	0.8	116	114	1.8	119	118	0.8
September	131	130	0.8	136	134	1.5	139	138	0.7
October	221	221	0.0	216	216	0.0	242	243	-0.4
November	394	391	0.8	490	489	0.2	498	503	-1.0
December	632	638	-0.9	751	758	-0.9	735	738	-0.4
Commercial									
January	548	476	15.1	419	427	-1.9	491	480	2.3
February	441	436	1.1	411	411	0.0	454	443	2.5
March	363	349	4.0	337	342	-1.5	403	387	4.1
April	254	237	7.2	256	254	0.8	296	284	4.2
May	175	163	7.4	190	184	3.3	190	183	3.8
June	142	132	7.6	133	133	0.0	142	133	6.8
July	140	129	8.5	132	133	-0.8	129	126	2.4
August	130	121	7.4	142	130	9.2	132	123	7.3
September	125	117	6.8	143	130	10.0	136	124	9.7
October	172	160	7.5	169	171	-1.2	181	171	5.8
November	248	236	5.1	300	297	1.0	304	295	3.1
December	345	340	1.5	429	420	2.1	412	409	0.7

See footnotes at end of table.

Table SR2. Initial Estimates and Revisions for Monthly Natural Gas Consumption in the United States, 1994-1996
(Volumes in Billion Cubic Feet) -- Continued

Month	1994			1995			1996		
	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]
Industrial									
January	726	757	-4.1	738	777	-5.0	779	800	-2.6
February	704	723	-2.6	719	707	1.7	744	747	-0.4
March	706	715	-1.3	739	738	0.1	757	781	-3.1
April	649	659	-1.5	734	720	1.9	727	736	-1.2
May	629	631	-0.3	711	711	0.0	697	701	-0.6
June	632	641	-1.4	666	663	0.5	701	710	-1.3
July	618	621	-0.5	685	677	1.2	674	677	-0.4
August	629	639	-1.6	682	684	-0.3	714	704	1.4
September	617	673	-8.3	642	670	-4.2	696	706	-1.4
October	662	679	-2.5	700	709	-1.3	731	737	-0.8
November	678	697	-2.7	742	736	0.8	767	764	0.4
December	704	732	-3.8	760	786	-3.3	775	807	-4.0
Electric Utility									
January	170	170	0.0	199	199	0.0	168	168	0.0
February	149	149	0.0	169	168	0.6	137	137	0.0
March	187	186	0.5	245	245	0.0	156	156	0.0
April	205	204	0.5	229	229	0.0	170	170	0.0
May	216	216	0.0	258	258	0.0	267	264	1.1
June	319	319	0.0	297	297	0.0	302	299	1.0
July	362	362	0.0	405	407	-0.5	357	358	-0.3
August	380	382	-0.5	468	468	0.0	368	367	0.3
September	295	296	-0.3	316	316	0.0	285	285	0.0
October	264	264	0.0	240	240	0.0	226	226	0.0
November	231	231	0.0	198	198	0.0	170	170	0.0
December	208	208	0.0	173	172	0.6	132	132	0.0

[a] The percent change is the initial value minus the final value, divided by the final value, multiplied by 100.
Note: The monthly volumes may not sum to total volume because the initial estimates in the early months of the year may have been revised before the annual total is first published.
Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

exports data, where EIA has very limited information to make the estimates and the volume amounts are relatively small, especially the export volume amounts, the resulting percentage differences tend to be large. For imports, the differences ranged from negative 19 percent to positive 9 percent during the 3-year period. Nearly all of the natural gas imports are pipeline imports from Canada. The methodology to estimate imports was based on the most recently available information from the National Energy Board (NEB) of Canada. The NEB provides data which are two months earlier that the month being estimated.

Total Consumption

For January 1994 through May 1996, initial total consumption estimates were analytical estimates. The initial estimates for June 1996 through December 1996 presented here were taken from a combination of reported data (residential, commercial, industrial, and electric utility data) and analytical estimates (lease fuel, plant fuel, and pipeline fuel data). As mentioned earlier, the initial estimates for total consumption were taken from the STIFS model beginning in June 1996, and they are not discussed in this report.

Total consumption is also a broad indicator of market activity in the natural gas industry. The initial volume was estimated on the basis of an average percentage change from the previous month to the current month. (See the Reporting Methodologies Appendix in the Article for a detailed description of the estimation methodology.) The percentage differences for total consumption compare initial analytical estimates to final consumption volumes which are taken from data reported to EIA surveys. Over the 3-year period, these differences ranged from negative 12 percent to positive 10 percent.

Consumption by Sector

The consumption sectors consist of deliveries to residential, commercial, and industrial consumers; consumption by electric utilities; consumption for lease and plant fuel; and consumption by natural gas pipelines as compressor fuel.

Table SR3. Initial Estimates and Revisions for Monthly Natural Gas Average Price in the United States, 1994-1996

(Prices in Dollars per Thousand Cubic Feet)

Month	1994			1995			1996		
	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]
Wellhead Price									
January	2.27	1.93	17.6	1.64	1.62	1.2	2.20	2.05	7.3
February	2.24	1.88	19.1	1.56	1.48	5.4	2.00	1.89	5.8
March	1.90	1.93	-1.6	1.54	1.47	4.8	2.04	1.95	4.6
April	1.93	1.91	1.0	1.57	1.52	3.3	2.22	2.08	6.7
May	1.83	2.00	-8.5	1.64	1.55	5.8	2.20	2.01	9.5
June	1.81	1.80	0.6	1.58	1.58	0.0	2.05	2.08	-1.4
July	1.76	1.81	-2.8	1.49	1.43	4.2	2.32	2.25	3.1
August	1.70	1.83	-7.1	1.53	1.43	7.0	2.30	2.10	9.5
September	1.56	1.78	-12.4	1.48	1.52	-2.6	1.99	1.85	7.6
October	1.60	1.70	-5.9	1.67	1.54	8.4	2.14	1.94	10.3
November	1.57	1.75	-10.3	1.72	1.61	6.8	2.70	2.50	8.0
December	1.77	1.88	-5.9	2.04	1.84	10.9	3.53	3.26	8.3
City Gate Price									
January	3.11	3.04	2.3	2.79	2.79	0.0	3.13	3.14	-0.3
February	3.25	3.26	-0.3	2.71	2.71	0.0	3.17	3.16	0.3
March	3.29	3.33	-1.2	2.81	2.74	2.6	3.16	3.17	-0.3
April	3.11	3.15	-1.3	2.71	2.72	-0.4	3.25	3.22	0.9
May	3.13	3.17	-1.3	2.75	2.80	-1.8	3.21	3.18	0.9
June	3.20	3.17	0.9	2.90	2.89	0.3	3.32	3.41	-2.6
July	3.17	3.12	1.6	2.88	2.89	-0.3	3.51	3.49	0.6
August	3.18	3.15	1.0	2.89	2.87	0.7	3.50	3.46	1.2
September	2.95	2.92	1.0	2.87	2.89	-0.7	3.07	3.05	0.7
October	2.82	2.80	0.7	2.88	2.83	1.8	2.93	2.94	-0.3
November	2.83	2.84	-0.4	2.68	2.67	0.4	3.47	3.46	0.3
December	2.80	2.86	-2.1	2.80	2.83	-1.1	4.19	4.18	0.2
Delivered to Consumers									
Residential Price									
January	5.75	5.93	-3.0	5.83	5.85	-0.3	5.61	5.64	-0.5
February	6.06	6.04	0.3	5.74	5.76	-0.3	5.80	5.82	-0.3
March	6.18	6.30	-1.9	5.86	5.84	0.3	5.87	5.93	-1.0
April	6.58	6.60	-0.3	6.04	6.06	-0.3	6.24	6.27	-0.5
May	7.01	6.84	2.5	6.51	6.54	-0.5	6.77	6.84	-1.0
June	7.59	7.66	-0.9	7.46	7.49	-0.4	7.72	7.83	-1.4
July	8.01	8.10	-1.1	7.68	7.82	-1.8	8.49	8.64	-1.7
August	8.13	8.22	-1.1	8.05	8.13	-1.0	8.56	8.73	-1.9
September	7.77	7.84	-0.9	7.68	7.73	-0.6	7.87	7.99	-1.5
October	6.86	6.86	0.0	6.62	6.62	0.0	7.07	7.05	0.3
November	6.25	6.27	-0.3	5.61	5.61	0.0	6.34	6.37	-0.5
December	6.02	6.06	-0.7	5.57	5.54	0.5	6.38	6.47	-1.4
Commercial Price									
January	4.94	5.50	-10.2	5.22	5.23	-0.2	5.19	5.29	-1.9
February	5.54	5.58	-0.7	5.11	5.14	-0.6	5.20	5.25	-1.0
March	5.60	5.67	-1.2	5.07	5.12	-1.0	5.24	5.36	-2.2
April	5.29	5.60	-5.5	5.02	5.08	-1.2	5.27	5.34	-1.3
May	5.41	5.47	-1.1	4.99	5.04	-1.0	5.33	5.40	-1.3
June	5.13	5.37	-4.5	5.11	5.16	-1.0	5.43	5.43	0.0
July	4.85	5.25	-7.6	5.04	5.03	0.2	5.52	5.46	1.1
August	5.31	5.31	0.0	4.93	4.99	-1.2	5.47	5.56	-1.6
September	5.12	5.36	-4.5	4.96	4.98	-0.4	5.34	5.46	-2.2
October	4.98	5.11	-2.5	4.77	4.82	-1.0	5.23	5.33	-1.9
November	5.11	5.19	-1.5	4.80	4.77	0.6	5.33	5.40	-1.3
December	5.13	5.24	-2.1	4.89	5.00	-2.2	5.74	5.78	-0.7

See footnotes at end of table.

Table SR3. Initial Estimates and Revisions for Monthly Natural Gas Average Price in the United States, 1994-1996
(Prices in Dollars per Thousand Cubic Feet) -- Continued

Month	1994			1995			1996		
	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]	Initial Value	Final Value	Percent Change[a]
Industrial Price									
January	3.32	3.47	-4.3	2.89	2.95	-2.0	3.32	3.61	-8.0
February	3.50	3.43	2.0	2.97	2.85	4.2	3.53	3.61	-2.2
March	3.53	3.47	1.7	3.02	2.74	10.2	3.55	3.52	0.9
April	3.10	3.01	3.0	2.59	2.57	0.8	3.32	3.42	-2.9
May	3.03	2.92	3.8	2.52	2.54	-0.8	3.11	3.14	-1.0
June	2.90	2.69	7.8	2.44	2.44	0.0	3.13	3.13	0.0
July	2.82	2.77	1.8	2.37	2.34	1.3	3.21	3.17	1.3
August	2.74	2.67	2.6	2.34	2.26	3.5	3.06	3.05	0.3
September	2.63	2.55	3.1	3.02	2.42	24.8	2.84	2.77	2.5
October	2.53	2.49	1.6	2.53	2.44	3.7	2.86	2.89	-1.0
November	2.82	2.86	-1.4	2.70	2.68	0.7	3.58	3.57	0.3
December	3.08	2.99	3.0	3.06	3.07	-0.3	4.17	4.20	-0.7
Electric Utility Price									
January	2.67	2.67	0.0	2.13	2.13	0.0	2.91	2.87	1.4
February	2.80	2.80	0.0	2.00	2.00	0.0	3.01	3.07	-2.0
March	2.66	2.67	-0.4	1.91	1.92	-0.5	2.70	2.73	-1.1
April	2.44	2.44	0.0	1.96	1.97	-0.5	2.68	2.68	0.0
May	2.46	2.46	0.0	2.05	2.06	-0.5	2.52	2.52	0.0
June	2.25	2.25	0.0	2.05	2.06	-0.5	2.59	2.59	0.0
July	2.28	2.27	0.4	1.90	1.90	0.0	2.69	2.69	0.0
August	2.13	2.16	-1.4	1.84	1.84	0.0	2.58	2.57	0.4
September	2.00	2.00	0.0	1.94	1.95	-0.5	2.26	2.24	0.9
October	1.95	1.95	0.0	2.08	2.09	-0.5	2.37	2.37	0.0
November	2.10	2.10	0.0	2.21	2.22	-0.5	3.03	3.04	-0.3
December	2.17	2.17	0.0	2.58	2.58	0.0	3.98	3.98	0.0

[a] The percent change is the initial value minus the final value, divided by the final value, multiplied by 100.
Source: Energy Information Administration, *Natural Gas Monthly,* 1994 through 1996.

Deliveries to Residential, Commercial, and Industrial Consumers. For 1994 through 1996, residential, commercial, and industrial consumption deliveries to consumers were estimated from reports to the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Generally, the revisions to residential consumption estimates were very small. From 1994 through 1996, the percentage differences ranged from negative 1 percent to positive 2 percent, except in January 1994 when the difference was positive 4 percent. For commercial deliveries, the percentage differences between initial and final monthly volumes were generally larger in 1994 than they were in the other 2 years. Across the 3-year period, the percentage differences for deliveries to industrial consumers ranged from negative 8 percent to positive 2 percent. These differences were generally smaller in 1995 and 1996 than they were in 1994.

Electric Utilities. Electric utility consumption is taken directly from reports to the Form EIA-759, "Monthly Power Plant Report."

Usually electric utility consumption data are not revised; if revisions are required, they are nearly always very small. Over the 3-year period, these percentage differences were no larger than positive or negative 1 percent.

Lease Fuel, Plant Fuel, and Pipeline Fuel. Lease fuel, plant fuel, and pipeline fuel estimates are analytical estimates.

Lease and plant fuel account for about 6 percent of total consumption. The differences between initial and final monthly estimates for these segments of the industry generally were smaller in 1995 and 1996 than in 1994.

Average Prices

Wellhead price estimates are analytical estimates. All other prices are taken from the Form EIA-857, except electric utility prices which are taken from reports to the Federal Energy Regulatory Commission (FERC) Form 423, " Monthly Report of Cost and Quality of Fuels for Electric Plants."

Wellhead Price. The wellhead price represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas; gathering and compression charges; and State production, severance, and / or similar charges.

The initial monthly wellhead prices are analytical estimates. The final monthly wellhead values are taken from reported monthly values, if available. In many States only an annual wellhead value is available. Annual values are distributed across the months according to the monthly distribution for similar States. Final monthly wellhead prices are calculated from the combination of the reported values, if available by month, and the values distributed across months. The percentage differences between initial and final wellhead prices were generally larger in 1994 than in subsequent years.

City Gate Price. The city gate price is the price at the point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system. Across the 3-year period, the differences between initial and final city gate prices were no larger than positive or negative 3 percent.

Residential, Commercial, and Industrial Prices. Prices in the residential, commercial, and industrial sectors represent only onsystem sales. Virtually all residential sales are included. However, the price is measured for only a portion of consumption in the commercial and industrial sectors. Residential prices are the highest of all of the consuming sectors and generally show the smallest variation from year to year. Across the 3-year period, most of the percentage differences between initial and final residential prices were no larger than positive or negative 1 percent. The largest differences were positive or negative 3 percent.

During the 1994-1996 period, onsystem sales of gas to commercial consumers represented from 77 to 79 percent of deliveries to commercial consumers. Generally, the percentage differences between initial and final commercial prices were small, although the differences in 1994 were somewhat larger than those in the other two years.

In 1994 and 1995 onsystem sales of gas to industrials represented 24 to 25 percent of total deliveries to industrials and in 1996 only 19 percent. The percentage differences for industrial prices showed some variation across the period, although they generally were within the range of positive or negative 4 percent. In March and September of 1995, the percentage differences between initial and final prices were substantial. Problems of misreporting of initial prices were identified and the subsequent corrections resulted in the large differences.

Electric Utility Prices. Prices for natural gas consumption by electric utilities are taken from reports filed by the utilities and reflect the price for all gas used by the utilities. None of the percentage differences from 1994 to 1996 were larger than positive or negative 2 percent.

Appendix: Reporting Methodologies

Table SR4 lists the methodologies for deriving the monthly data to be published initially for the components of natural gas supply and disposition. Monthly numbers are revised each year so that their totals for the 12 months will agree with the annual totals published in the *Natural Gas Annual*, and the revised monthly numbers are published in the following issue of the *Natural Gas Monthly*. In some instances, monthly data are reported on an annual survey, and the monthly estimates are revised to reflect the reported data. When monthly data are not reported, the percentage distribution across months for the monthly estimates is applied to the final annual number to derive final monthly estimates. The most current monthly natural gas data, including any revisions, are also published in EIA's *Monthly Energy Review*.

Throughout this discussion, many sources of data and methods of estimation are referenced. Appendices A (Explanatory Notes), B (Data Sources), and C (Statistical Considerations) of the *Natural Gas Monthly* provide further information about data sources, estimation procedures, annual adjustments, and sample design. These sources may also be helpful in evaluating the monthly data.

Marketed Production

Marketed production for the current month is estimated by the EIA by determining a daily production rate for the month. This estimated daily rate of production is then multiplied by the number of days in the

month to produce the production estimate for the month. The effects of weather, storage levels, gas import volumes, and other industry developments are considered in preparing the estimate.

The estimate of a daily production rate is made by applying an average historic daily production ratio to a daily base rate, usually the latest known rate. The average historic daily production ratio equals the ratio of the daily rate during a given month to the daily rate during the previous month. This calculation is performed on eight years of historic data, and the average ratio for a particular month may be any combination of 2 to 8 years of historic ratios. The final determination of the average historic daily production ratio to be used is made by an analyst.

The average historic daily production ratio is applied to the latest known monthly production rate to yield the daily rate estimate for the month in question. This new daily rate estimate is then multiplied by the historic production ratio for the next month to yield that month's daily rate estimate, and the procedure continues for successive months.

The monthly marketed production data are revised on the basis of the data reported on Form EIA-895, "Monthly Quantity of Natural Gas Report." This is a voluntary form, and data from this form become available about 2 months after the initial analytical estimates are published. The respondents—-energy, tax, or conservation agencies in the natural gas-producing States—-provide production data. Beginning with the collection of 1995 monthly production data, the EIA began using the Form EIA-895. Prior to 1995, voluntary reports showing monthly production data were filed with the Interstate Oil and Gas Compact Commission (IOGCC) by most of the gas-producing States, and these reports were used to adjust the analytical estimates 2 months later.

Through 1995, State offices also provided the natural gas production reports filed annually with the EIA on the Form EIA-627, "Annual Quantity and Value of Natural Gas Report." Form EIA-627 respondents provided production numbers by month and a total for the year. Data reported on this Form become the final production information. In some States, these reports were not available at the time that the EIA issues the *Natural Gas Annual*, so production data were taken from the EIA annual publication *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, or EIA estimated the data on the basis of historical filings. When the data reported on Form EIA-627 were subsequently received, any necessary revisions are made, and the revised data are published in the *Natural Gas Monthly*. Beginning with the collection of 1996 data, the EIA discontinued the Form EIA-627. Production volumes are now reported each month on the Form EIA-895.

Total Consumption

Through May 1996, analytical estimates of total consumption were based on percentage changes. An average percentage change over the previous 3 years was applied to the previous month's data to estimate a value for the current month's consumption. Consumption of natural gas fluctuates across the months of the year as residential and commercial heating requirements change due to the seasonal variation in the weather. Since the estimate for total consumption was based on an average activity over the past 3 years, it sometimes showed large revisions if the weather for the current year was markedly colder or warmer than the average weather of the previous 3 years.

To make the estimate, an average percentage change was calculated by averaging the percentage changes from the previous to current months for the corresponding time period during the previous 3 years. For example, to estimate consumption for July 1995, the percentage changes in consumption from June 1994 to July 1994, from June 1993 to July 1993, and from June 1992 to July 1992 were calculated. These three figures were then averaged, and this average change was applied to the June 1997 consumption volume to estimate July 1997 consumption.

Beginning in June 1996, initial estimates of total consumption were taken from the Short-Term Integrated Forecasting System (STIFS) model. The STIFS estimates were replaced 3 months later with reported data. This article does not address the differences between the STIFS estimates for total consumption and the final monthly data (for the period from June 1996 through December 1996).

Dry Gas Production and Extraction Loss

The analytical estimate of extraction loss is estimated by applying the annual ratio of extraction loss to marketed production to each month's marketed production volume. The ratio is calculated by using the most recently available annual data. Dry production of natural gas is then derived by subtracting the extraction loss estimate from the marketed production estimate.

Storage

Monthly natural gas storage data are reported on the Form EIA-191, "Monthly Underground Gas Storage Report," by all storage operators, including interstate pipeline storage operators. The form collects storage data by State, county, and storage field. The annual totals of monthly storage additions and withdrawals reported on the Form EIA-191 are compared with the annual storage additions and withdrawals reported on the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and all differences are resolved with the respondents.

Differences between final and initial reported storage volume data are caused primarily by two factors. First, the monthly storage volumes are taken from reports for underground facilities only, whereas the annual storage volume data also include reports for liquefied natural gas (LNG) facilities. Second, monthly respondents frequently estimate the volumes they report and sometimes revise them later. Thus, differences in storage volume data are due primarily to revisions by respondents. These data are validated by the EIA and published without any statistical estimation or adjustment.

Imports and Exports

Initial monthly analytical estimates of exports of natural gas are estimated on the basis of analysis of the industry and shipments of liquefied natural gas. Initial monthly analytical estimates of import data are estimated by the same techniques, in addition to using data from the National Energy Board of Canada. From 1984 to 1992, pipeline imports of gas came only from Canada. Small amounts of gas have been imported from Mexico since late 1993.

Final monthly export and import data were reported on the Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Although this was an annual form, it required the reporting of data by month. The Form FPC-14 was discontinued after the reporting of 1994 data. In 1995 and subsequent years, final import and export data are taken from reports to the Office of Fossil Energy, U.S. Department of Energy.

Supplemental Gaseous Fuels

Monthly analytical estimates of supplemental gaseous fuels are derived from the sum of marketed production, net imports, and net withdrawals from storage. The ratio of supplemental gaseous fuels to the sum of these three components, as reported annually in the *Natural Gas Annual*, is applied to the monthly sum of these three components to calculate part of the estimate. The total estimate is the sum of this calculation and the volume of gas produced from coal gasification obtained from the Great Plains coal gasification plant in North Dakota. When annual data become final, the monthly supplemental gaseous fuels data are adjusted and become final.

Consumption by Sector

The residential, commercial, industrial, and electric utility sectors represent about 91 percent of total annual consumption. Lease and plant fuel data represent about 6 percent of total annual consumption, and analytical estimates are derived from monthly marketed production data. Pipeline fuel represents the smallest component of annual consumption, approximately 3 percent. Analytical estimates of pipeline fuel are derived as a percent of total consumption.

Residential, Commercial, and Industrial Deliveries

Deliveries to residential, commercial, and industrial consumers are estimated from reports on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," a sample survey of natural gas companies that deliver gas to consumers. The sample is drawn from the respondents to the annual Form EIA-176. The sample design and estimation procedures are described in detail in “Statistical Considerations,” Appendix C of the *Natural Gas Monthly*. Briefly, the sample design is stratified so that, within each State, all companies handling large amounts of gas respond to the survey, and a sample of companies handling lesser amounts of gas also respond. In some States where there is a small number of companies, all companies report, and the reported data are shown without any estimation adjustments.

Electric Utility Consumption

Consumption by electric utilities is reported on the Form EIA-759, "Monthly Power Plant Report," filed by electric power plant operators. No sampling or estimation procedures are needed.

Lease Fuel, Plant Fuel, and Pipeline Fuel

The annual ratio of lease and plant fuel consumption to marketed production, as published in the *Natural Gas Annual*, is applied to the monthly marketed production number to calculate an analytical estimate. The ratio is calculated from the most recently available annual data.

From 1991 through 1995, lease fuel data were reported on the Form EIA-627. The respondents—energy, tax, or conservation agencies in the natural gas-producing States—provided a distribution by month of their annual lease fuel data. If monthly lease fuel data were not available for a State from the Form EIA-627, the ratio of annual lease fuel (as reported on the Form EIA-176) to gross withdrawals was calculated for the State. This ratio was then applied to monthly gross withdrawals for the State to estimate final monthly lease fuel. Plant fuel data are reported annually on the Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production," beginning in 1990. A monthly distribution is not reported for plant fuel. Annual plant fuel consumption is adjusted to the monthly distribution of the estimates.

Pipeline fuel data are the smallest component of consumption. To make the initial analytical estimate of monthly consumption of natural gas by pipelines, the most recent annual ratio of pipeline fuel consumption to total consumption, as published in the *Natural Gas Annual*, is applied to the monthly total consumption. When annual data for pipeline fuel become final, the revised annual ratio is calculated and is applied to each month's revised total consumption number to compute final monthly pipeline fuel consumption estimates.

Average Prices

Wellhead Prices

An initial analytical estimate of the wellhead price is calculated on the basis of the statistical relationships between U.S. monthly wellhead gas prices and the production-weighted monthly State wellhead prices from five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas, when available. Initial wellhead prices are adjusted, when necessary, in following months on the basis of the change in the production-weighted gas price from each of the five States. See Appendix A, "Explanatory Notes," of the *Natural Gas Monthly* for further discussion of wellhead values.

Final monthly wellhead prices were calculated from reports to the Form EIA-627 through 1995. The wellhead value reported on the form is divided by the corresponding marketed production volume to compute the average price. See Appendix A, "Summary of Data Collection Operations and Report Methodology," of the *Natural Gas Annual* for a more detailed discussion of the reporting of wellhead values and prices. In 1994 and 1995, the annual Form EIA-627 requested that respondents report wellhead values by month. However, many States reported only an annual wellhead value. The annual values were distributed across the months according to the monthly distribution for similar States. Monthly wellhead prices were calculated from the combination of the reported values, if available by month, and the values distributed across months.

The EIA discontinued the Form EIA-627 in 1996 and replaced it with the Form EIA-895 (described above in the section about marketed production). Responding States are requested to report revenues on a monthly basis on this new Form. In most cases they are not able to provide revenue data until they close their reporting for the year, usually a few months after the end of the year. Many States report the annual revenue but do not allocate it by month. In these instances, the annual values are distributed across the months according to the monthly distribution for similar States.

City Gate Price

The city gate price is the price at the point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

These prices are reported monthly on the sample survey Form EIA-857, described above. City gate prices are not reported on an annual survey form. Annual prices are calculated by dividing the sum of the revenues for 12 months by the sum of the volumes for 12 months.

Residential, Commercial, and Industrial Prices

Revenues for sales to residential, commercial, and industrial consumers are also reported on the Form EIA-857 with their associated volume. Average prices are calculated by dividing total revenue by total volume. Monthly prices are revised to agree with data published in the *Natural Gas Annual.* Average prices for deliveries to consumers are calculated for onsystem

sales only. Prices for gas delivered for the account of others are not available.

As the natural gas industry has moved toward open access, there has been an increase in the demand for the service of delivering gas for others. This type of arrangement means that someone other than the respondent to the Form EIA-857 actually owns and sells the gas. For example, a consumer contracts directly with a gas well operator or gas marketer to purchase gas supplies, while a pipeline or local distribution company (the Form EIA-857 respondent) provides only the transmission service. The respondents to the Form EIA-857 do not know the price of the gas that they transport for others.

In 1994, the industrial price data represent information for 25 percent of deliveries to industrials, in 1995 for 24 percent, and in 1996 for 19 percent. In the commercial sector, the 1994 price data represent information for 79 percent of deliveries, in 1994 for 77 percent, and in 1996 for 78 percent.

In the residential, commercial and industrial sectors, when annual data become available, the percentage distribution across months for the reported revenue is applied to the annual revenue amount to estimate monthly revenue. An average price is then calculated by using this revenue and the similarly estimated volume amounts.

Electric Utility Prices

Electric utility prices are taken from reports by the utilities on the Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." Revenues are reported in cents per million Btu and converted to dollars per thousand cubic feet of natural gas. See the EIA annual report *Cost and Quality of Fuels for Electric Utility Plants* for more detailed information about prices of natural gas delivered to electric utilities.

Table SR4. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Estimated from Historical Data using Knowledge of Industry Developments
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Total Consumption	Estimated from Average Historical Month-to-Month Percent Changes for the previous 3 years
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Total Consumption
Deliveries to Consumers	
Residential	Estimated from Survey Form EIA-857
Commercial	Estimated from Survey Form EIA-857
Industrial	Estimated from Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759
Average Prices	
Wellhead Price	Estimated Monthly State Wellhead Prices from Five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas (when available)
City Gate Price	Estimated from Survey Form EIA-857
Deliveries to Consumers	
Residential	Estimated from Survey Form EIA-857
Commercial	Estimated from Survey Form EIA-857
Industrial	Estimated from Survey Form EIA-857
Electric Utilities	Reported on FERC Form 423

Highlights

Overview

This issue of the *Natural Gas Monthly* presents the most recent estimates of natural gas data from the Energy Information Administration (EIA). Estimates extend through July 1998 for many data series and through April for most price series. This issue also includes a special report, "Revisions to Monthly Natural Gas Data." The report discusses the differences between the initial (first) estimates of monthly supply and disposition data published for 1994, 1995, and 1996 and the final monthly data published for those years. EIA provides this information to assist users in evaluating the usefulness of preliminary data.

Highlights of the July 1998 data contained in this issue are:

- The deliveries to industrial consumers have been revised upward for January, February, and March 1998 and downward for April. With these revisions, they total 4,987 billion cubic feet from January through July 1998, still less than the year-ago level, by 3 percent.

- Net injections into underground storage continued at a rapid rate as the 1998 refill season (April through October) passed its mid-point. Working gas in storage at the end of July was 2,495 billion cubic feet, 24 percent higher than at the end of July 1997.

- Thus far in 1998, monthly estimates of natural gas production are 1 percent higher than 1997 levels and estimates of net imports are 4 percent higher.

- Cumulatively for January through July 1998, natural gas consumption declined in the residential, commercial, and industrial end-use sectors compared with a year ago. Total end-use consumption is estimated to be 12,888 billion cubic feet, 3 percent lower than for the same period of 1997. The drop in residential and commercial consumption can be attributed in part to the warmer-than-normal temperatures during the 1997-98 heating season (November through March), resulting in less demand for gas for space heating.

Cumulatively from January through April 1998, all natural gas prices dropped compared with levels for the same time period in 1997. The decrease in prices reflects the lower demand for gas during the past heating season. However, the wellhead price rose in March and April, after declining during the previous 3 months.

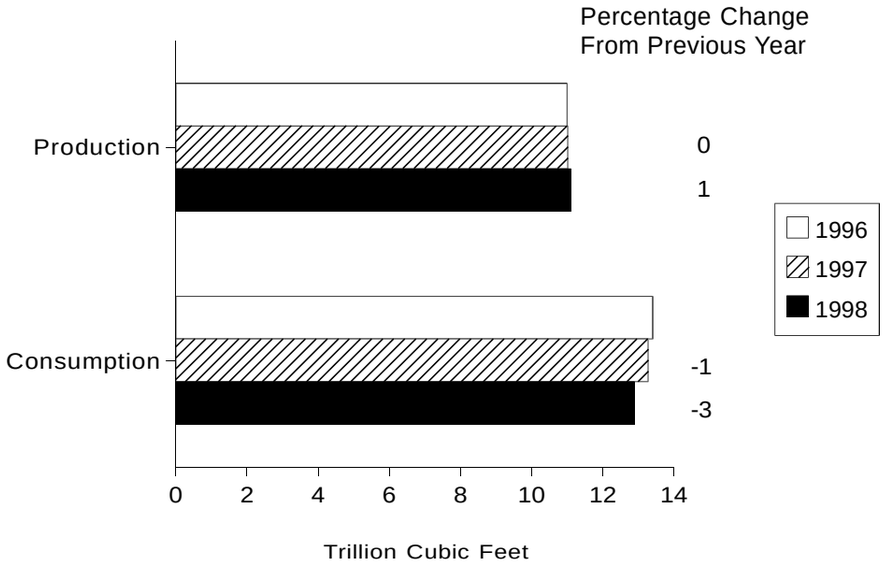
Supply

Estimates of natural gas production and net imports through July 1998 indicate a slight increase in supply compared with year-ago levels. Dry gas production in July 1998 was estimated to be 1,611 billion cubic feet or 52.0 billion cubic feet per day (Table 1). This level is 4 percent higher than the previous month's estimate, but only 1 percent higher than in July 1997. Cumulatively from January through July, dry production rose 1 percent from 1997 to 1998 (Figure HI1).

Net imports, which make a significant contribution to the supply of natural gas in the United States, are estimated to be 238 billion cubic feet in July 1998 or 7.7 billion cubic feet per day (Table 2). The monthly estimates of net imports in 1998 have exceeded those of 1997 in every month. Cumulatively for January through July, net imports are 4 percent higher than they were 1 year ago.

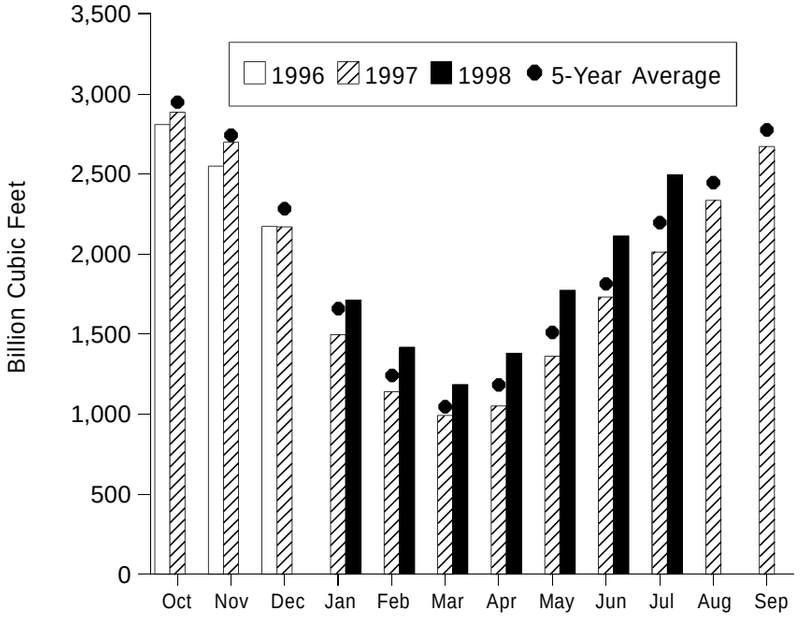
Injections into underground storage continued at a strong rate as the 1998 refill season passed its mid-point. Working gas in underground storage had ended the 1997-98 heating season (November through March) at 1,184 billion cubic feet, 19 percent more than at the end of the previous heating season. Despite this higher working gas level, so far this refill season an estimated 1,313 billion cubic feet of gas has been added to underground storage, 28 percent more than during the same months last year. Working gas in storage at the end of July 1998 is estimated to be 2,495 billion cubic feet, 24 percent more than at the end of July 1997. (Figure HI2).

Figure HI1. Natural Gas Production and Consumption, January-July, 1996-1998



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1996-1998



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

End-Use Consumption

The deliveries of natural gas to industrial consumers have been revised upward for January, February, and March 1998. The total for these 3 months is now 2,275 billion cubic feet, 3 percent higher than the total published in the June issue of the *Natural Gas Monthly*. These revisions are the result of corrections to misreported data. Reports to EIA surveys may contain errors because of changes at companies such as mergers, acquisitions, and corporate reorganizations. Sometimes the data are not reported correctly until errors and appropriate corrections are identified through EIA quality assurance procedures. EIA will continue to investigate the reporting of industrial data in 1998 as part of its ongoing program of quality assurance.

The April 1998 natural gas deliveries to industrials have been reported on an EIA survey at 694 billion cubic feet, 2 percent less than the 705 billion cubic feet estimated for April from the Short-Term Integrated Forecasting System (STIFS) model as published last month. In this, the July issue of the *Natural Gas Monthly*, deliveries to industrials in 1998 are reported from an EIA survey for January through April and estimated from the STIFS model for May through July. Cumulatively for January through July 1998, they total 4,987 billion cubic feet, still less than the year-ago level, by 3 percent.

During July 1998, natural gas consumption by end users is estimated to be 1,389 billion cubic feet, 5 percent more than in June (Table 3). End-use consumption for the first 7 months of the year is estimated to be 11,751 billion cubic feet, 3 percent lower than for the same period of 1997. Cumulative decreases in the residential, commercial, and industrial sectors contributed to the overall decrease in consumption. Residential sector consumption was 237 billion cubic feet lower than during the first 7 months of 1997. Estimated consumption in the commercial and industrial sectors was 117 and 155 billion cubic feet lower, respectively, than during the first 7 months of 1997 (Figure HI3).

For the month of July, consumption estimates in the residential and commercial sectors totaled 282 billion cubic feet. This estimate is equal to consumption levels reported in July 1997.

Estimates of natural gas consumption by electric utilities are available through April 1998. Electric utilities consumed an estimated 190 billion cubic feet in April 1998, 2 percent less than in March. Cumulatively from January through April, electric utility consumption was 689 billion cubic feet, more than 3 percent higher than during the same period of 1997. Electric utility consumption is typically at its lowest during the winter months when the demand for natural gas for space heating is at its highest. Data for 1998 that might show demand increases resulting from summer air-conditioning requirements are not yet available.

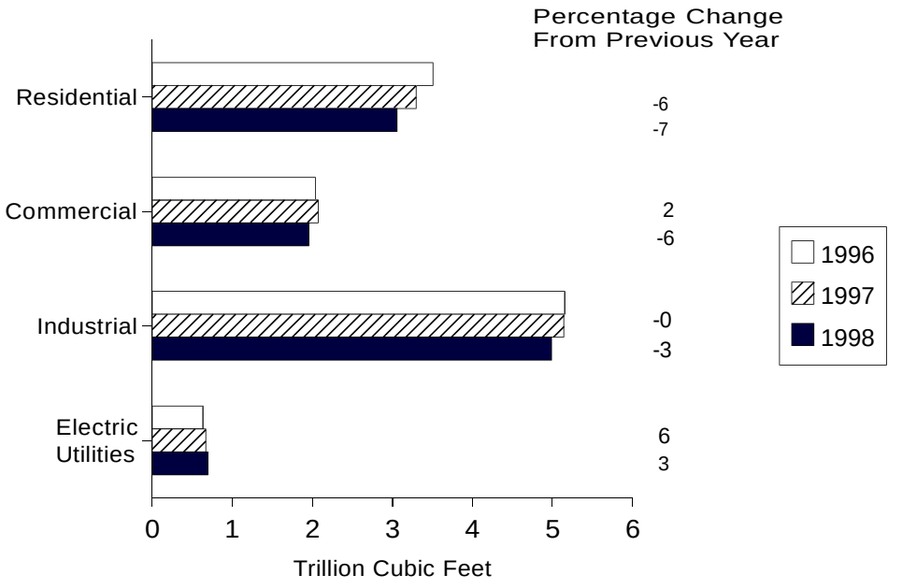
Prices

The average natural gas wellhead price in April 1998 is estimated to be $2.05 per thousand cubic feet, 10 percent higher than the price in March and 25 percent higher than in April 1997 (Table 4). This is the second consecutive month that the price has increased, after declining in December 1997 and January and February of this year. The rise in the wellhead price was primarily due to weather forecasts calling for warmer-than-normal temperatures which could result in a greater demand for gas by electric utilities as they need to meet increased loads for air-conditioning.

The estimated price paid for natural gas in the residential sector increased by 8 percent between March and April to $6.73 per thousand cubic feet. This is the first increase in residential prices since August 1997 when the price peaked at $8.82 per thousand cubic feet. Cumulatively from January through April 1998, the price averaged $6.43 per thousand cubic feet, 4 percent less than during the same period in 1997 (Figure HI4). The price for deliveries to commercial consumers also increased between March and April, by 3 percent.

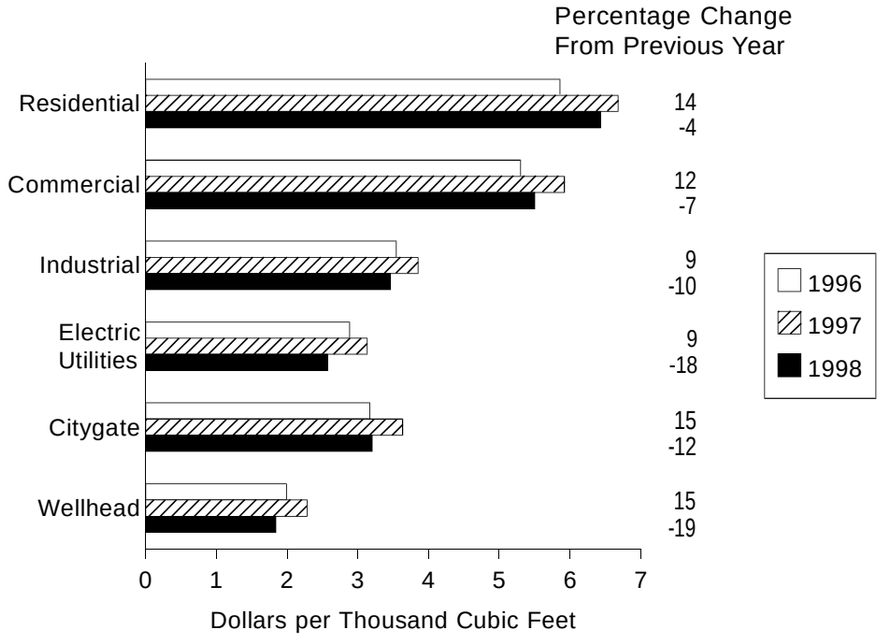
In the industrial and electric utility sectors, prices are usually more sensitive to increases in wellhead prices, but April data indicate that the industrial price declined by $0.19 per thousand cubic feet or almost 6 percent. This may be the result of more long-term purchases by industrial consumers or the marketers that supply them. Cumulatively from January through April, the industrial price was 10 percent below the level for the same period in 1997. The electric utility prices are available through March 1998 in this report. Cumulatively from January through March, estimated prices in the electric utility sector are 18 percent lower in 1998 than in 1997—$3.13 versus $2.57 per thousand cubic feet.

Figure HI3. Natural Gas Delivered to Consumers, January-July, 1996-1998



Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

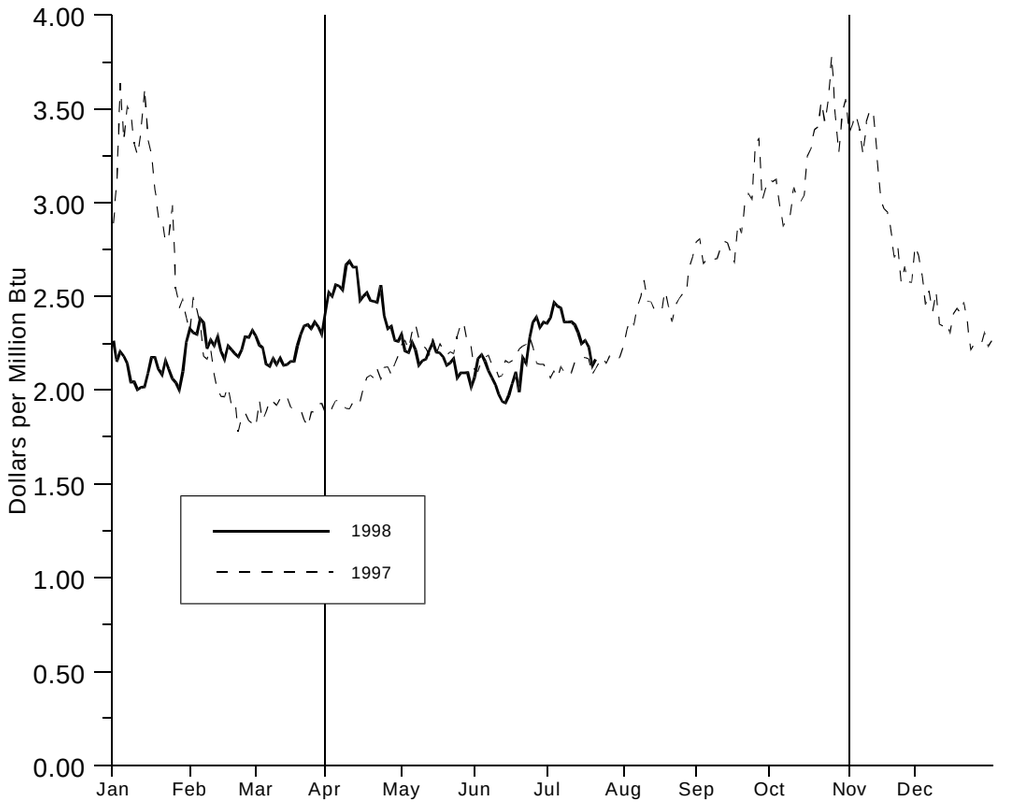
Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-April 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

The July futures contract at the Henry Hub expired on June 26 at $2.358 per MMBtu—more than 20 cents higher than last year's price ($2.145). The August contract price was generally stable during early July at about $2.35 per MMBtu before beginning a downward trend in the second week of the month (Figure HI5). At the close of trading on July 23, the contract settled at $1.934 per MMBtu. Even with the hot weather in the Southwest during June and July, most market observers believe that the overall demand for gas is generally moderate at this time. The moderate demand combined with the elevated level of gas in storage is contributing to a softening in the price of gas.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

Table 1. Summary of Natural Gas Production in the United States, 1992-1998

(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production (Wet)	Extraction Loss[b]	Dry Gas Production[c]
1992 Total	22,132	2,973	280	168	18,712	872	17,840
1993 Total	22,726	3,103	414	227	18,982	886	18,095
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996							
January	2,052	310	44	26	1,673	81	1,591
February	1,941	294	41	24	1,580	77	1,504
March	2,054	313	45	23	1,674	81	1,592
April	2,003	289	42	22	1,650	80	1,570
May	2,025	281	42	23	1,679	81	1,598
June	1,962	276	36	16	1,634	79	1,555
July	2,008	271	42	24	1,672	81	1,591
August	2,021	281	45	24	1,671	81	1,590
September	1,958	283	44	22	1,609	78	1,531
October	2,011	306	44	23	1,638	79	1,558
November	1,984	299	47	23	1,615	78	1,537
December	2,032	307	46	23	1,656	80	1,576
Total	24,052	3,510	518	272	19,751	958	18,793
1997							
January	E2,094	E327	E41	E21	E1,704	E83	E1,622
February	E1,910	E301	E38	E19	E1,553	E75	E1,477
March	E2,098	E322	E43	E23	E1,711	E83	E1,628
April	E1,985	E296	E42	E21	E1,626	E79	E1,547
May	E2,070	E313	E42	E21	E1,693	E82	E1,610
June	E1,975	E294	E40	E21	E1,620	E79	E1,541
July	E2,032	E295	E42	E22	E1,674	E81	E1,593
August	E2,009	E283	E42	E22	E1,663	E81	E1,582
September	E1,983	E295	E42	E21	E1,625	E79	E1,546
October	E2,054	E318	E44	E23	E1,669	E81	E1,589
November	E2,026	E308	E43	E22	E1,654	E80	E1,574
December	E2,110	E334	E44	E24	E1,708	E83	E1,626
Total	E24,346	E3,685	E503	E258	E19,900	E965	E18,935
1998							
January	E2,107	E331	E45	E22	E1,708	E83	E1,625
February	RE1,924	RE293	E41	E19	RE1,570	E76	RE1,494
March	RE2,090	RE320	E45	E22	RE1,703	RE83	RE1,621
April	RE2,022	RE312	E43	E21	E1,646	E80	E1,566
May	E2,103	E322	E45	E22	E1,714	E83	E1,631
June(STIFS)	NA	NA	NA	NA	E1,632	E79	E1,553
July(STIFS)	NA	NA	NA	NA	E1,693	E82	E1,611
1998 YTD	NA	NA	NA	NA	E11,666	E565	E11,101
1997 YTD	E14,164	E2,148	E289	E147	E11,580	E562	E11,019
1996 YTD	14,045	2,034	292	158	11,561	561	11,001

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[b] Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Equal to marketed production (wet) minus extraction loss.

E = Estimated Data.

RE = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996.* January 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1992-1998

(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels[a]	Net Imports	Net Storage Withdrawals[b]	Balancing Item[c]	Consumption[d]
1992 Total	17,840	118	1,921	173	-508	19,544
1993 Total	18,095	119	2,210	-36	-110	20,279
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996						
January	1,591	12	249	723	-2	2,574
February	1,504	11	221	462	138	2,335
March	1,592	11	226	333	46	2,209
April	1,570	9	227	-119	139	1,826
May	1,598	6	244	-339	67	1,576
June	1,555	8	214	-388	65	1,454
July	1,591	8	222	-382	-3	1,436
August	1,590	8	221	-358	4	1,465
September	1,531	8	227	-379	12	1,399
October	1,558	9	236	-210	-62	1,531
November	1,537	10	238	272	-161	1,896
December	1,576	10	259	387	35	2,266
Total	18,793	109	2,784	2	279	21,967
1997						
January	E1,622	E13	264	684	R-65	R2,517
February	E1,477	E11	231	358	R179	2,256
March	E1,628	E10	243	155	R69	2,105
April	E1,547	E9	221	-58	75	1,794
May	E1,610	E9	229	-321	72	1,601
June	E1,541	E7	226	-364	R44	R1,454
July	E1,593	E8	222	-281	R10	R1,552
August	E1,582	E9	231	-322	R27	R1,527
September	E1,546	E7	232	-336	R-1	1,448
October	E1,589	E9	234	-211	-84	1,537
November	E1,574	E11	254	189	-143	1,885
December	E1,626	E12	246	533	-102	2,315
Total	E18,935	E116	2,833	27	80	21,991
1998						
January	E1,625	E12	R267	466	R22	R2,392
February	RE1,494	E10	R237	299	R56	R2,096
March	RE1,621	E11	R244	241	R-1	R2,116
April	E1,566	E9	RE237	-198	R84	R1,698
May	E1,631	E8	E243	-393	88	E1,576
June(STIFS)	E1,553	E9	E238	E-342	RE10	RE1,467
July(STIFS)	E1,611	E9	E238	E-380	E65	E1,542
1998 YTD	E11,101	E68	E1,702	E-307	E324	E12,888
1997 YTD	E11,019	E68	1,636	172	383	13,279
1996 YTD	11,001	65	1,604	289	449	13,409

[a] Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0025 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

[b] Monthly and annual data for 1991 through 1996 include underground storage and liquefied natural gas storage. Data for January 1997 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

[c] Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

[d] Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

R = Revised Data.

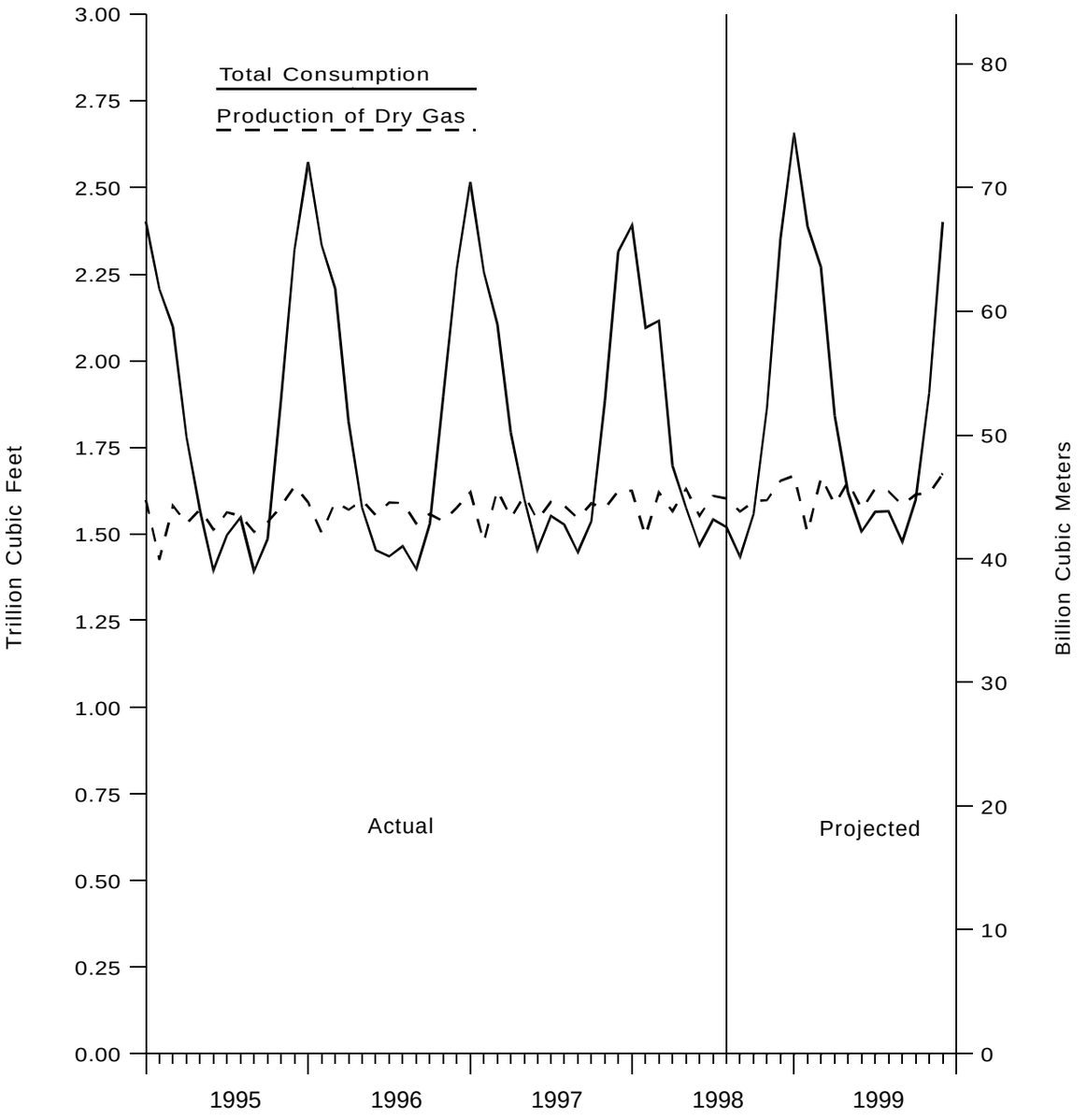
E = Estimated Data.

RE = Revised Estimated Data.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996,* 1994-1995: EIA: Form EIA-627, "Annual Quantity and Value of Natural Gas Report" (1995 data only), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, " Monthly Underground Gas Storage Report," Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," EIA computations and *Natural Gas Annual 1996.* January 1997 through current month: EIA, Form EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports. See Appendix A for dicussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1995-1999



Sources: 1995 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook* (October 1997).

Table 3. Natural Gas Consumption in the United States, 1992-1998

(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel[a]	Pipeline Fuel[b]	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1992 Total	1,171	588	4,690	[c]2,803	7,527	2,766	17,786	19,544
1993 Total	1,172	624	4,956	[c]2,863	7,981	2,682	18,483	20,279
1994 Total	1,124	685	4,848	[c]2,897	8,167	2,987	18,899	20,708
1995 Total	1,220	700	4,850	[c]3,034	8,580	3,197	19,660	21,581
1996								
January	106	85	934	480	800	168	2,382	2,574
February	101	77	831	443	747	137	2,158	2,335
March	106	72	705	387	781	156	2,030	2,209
April	104	59	474	284	736	170	1,663	1,826
May	106	50	271	183	701	264	1,420	1,576
June	102	46	162	133	710	299	1,305	1,454
July	105	46	124	126	677	358	1,285	1,436
August	105	47	118	123	704	367	1,312	1,465
September	102	45	138	124	706	285	1,253	1,399
October	104	49	243	171	737	226	1,378	1,531
November	103	62	503	295	764	170	1,732	1,896
December	105	74	738	409	807	132	2,086	2,266
Total	1,250	711	5,241	[c]3,161	8,870	2,732	20,006	21,967
1997								
January	[E]107	82	907	[R]478	[R]805	139	[R]2,329	[R]2,517
February	[E]97	73	767	428	748	143	2,086	2,256
March	[E]107	68	606	366	768	190	1,930	2,105
April	[E]102	58	435	273	733	193	1,634	1,794
May	[E]106	52	286	[R]213	713	231	1,443	1,601
June	[E]101	47	161	[R]161	[R]688	296	[R]1,306	[R]1,454
July	[E]105	[R]50	131	151	[R]687	428	[R]1,397	[R]1,552
August	[E]104	49	[R]120	[R]148	[R]714	391	[R]1,373	[R]1,527
September	[E]102	47	132	[R]148	[R]687	333	1,300	1,448
October	[E]105	50	236	195	706	246	1,383	1,537
November	[E]104	61	499	317	724	180	1,720	1,885
December	[E]107	75	732	413	790	199	2,133	2,315
Total	[E]1,246	712	[R]5,011	[R]3,291	[R]8,762	2,969	20,033	21,991
1998								
January	[E]107	77	[R]794	445	[R]798	171	[R]2,208	[R]2,392
February	[E]98	[R]68	676	[R]392	[R]729	134	[R]1,930	[R]2,096
March	[RE]107	[R]69	631	368	[R]748	194	[R]1,941	[R]2,116
April	[RE]103	[R]55	[R]402	[R]253	[R]694	190	[R]1,540	[R]1,698
May(STIFS)	[E]104	[E]50	[E]252	[E]194	[E]680	[NA]	[E]1,422	[E]1,576
June(STIFS)	[E]100	[E]46	[RE]166	[E]152	[E]662	[NA]	[RE]1,322	[RE]1,467
July(STIFS)	[E]103	[E]50	[E]134	[E]148	[E]677	[NA]	[E]1,389	[E]1,542
1998 YTD[d]	[E]722	[E]415	[E]3,055	[E]1,953	[E]4,987	689	[E]11,751	[E]12,888
1997 YTD	[E]725	430	3,292	2,070	5,142	666	12,124	13,279
1996 YTD	731	435	3,502	2,036	5,153	631	12,242	13,409

[a] Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

[b] Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption (excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

[c] Vehicle fuel deliveries, in billion cubic feet, were 0.4 in 1991, 0.5 in 1992, 1.0 in 1993, 1.7 in 1994, 2.7 in 1995 and 2.9 in 1996.

[d] Year-to-date volume represents months for which volume information is available in the current year.

[R] = Revised Data.

[E] = Estimated Data.

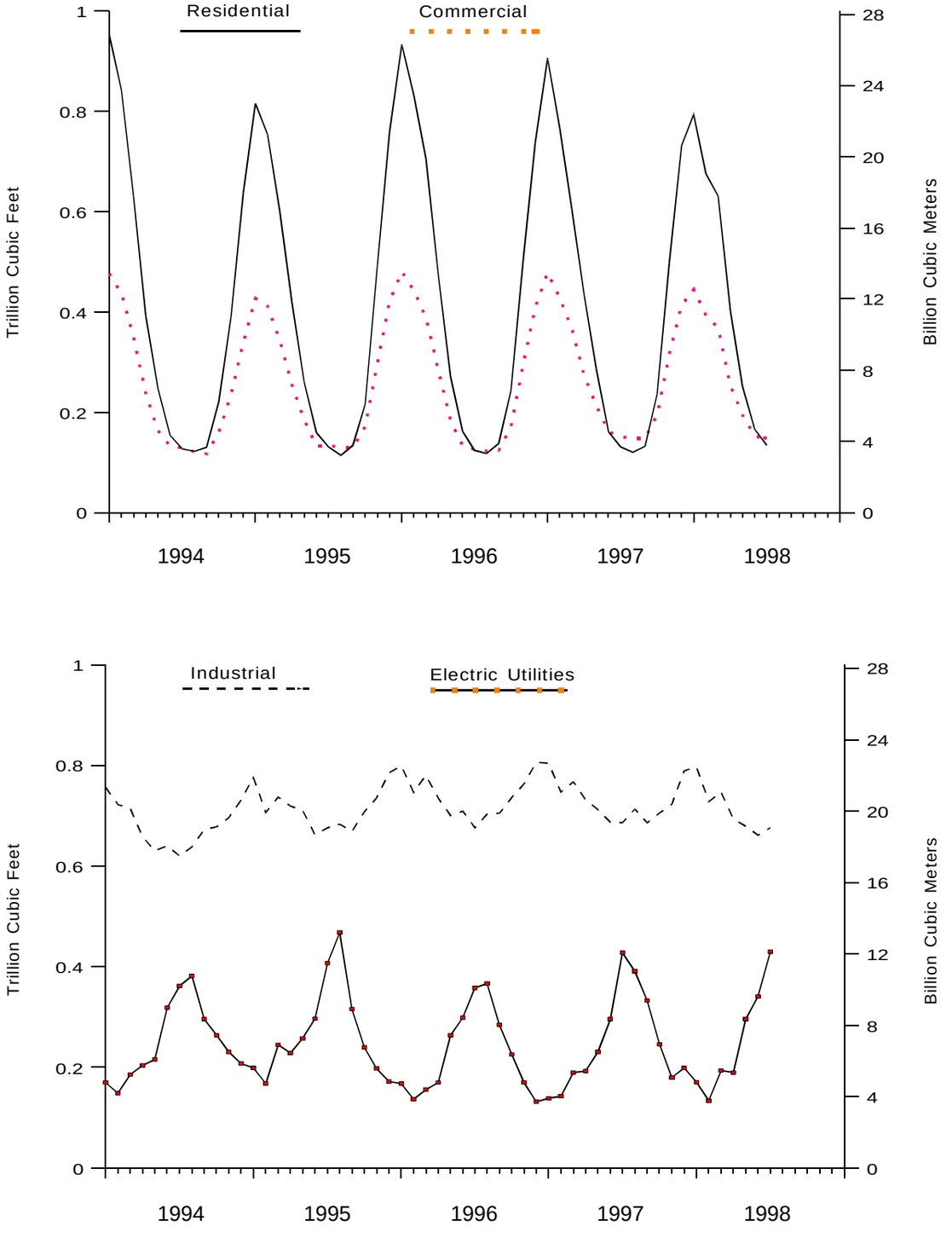
[RE] = Revised Estimated Data.

[NA] = Not Available.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1992-1996: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1996*. January 1997 through the current month: EIA: Form 895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1994-1998



Sources: *Natural Gas Annual*, Form EIA-857, and Form EIA-759.

Table 4. Selected National Average Natural Gas Prices, 1992-1998

(Dollars per Thousand Cubic Feet)

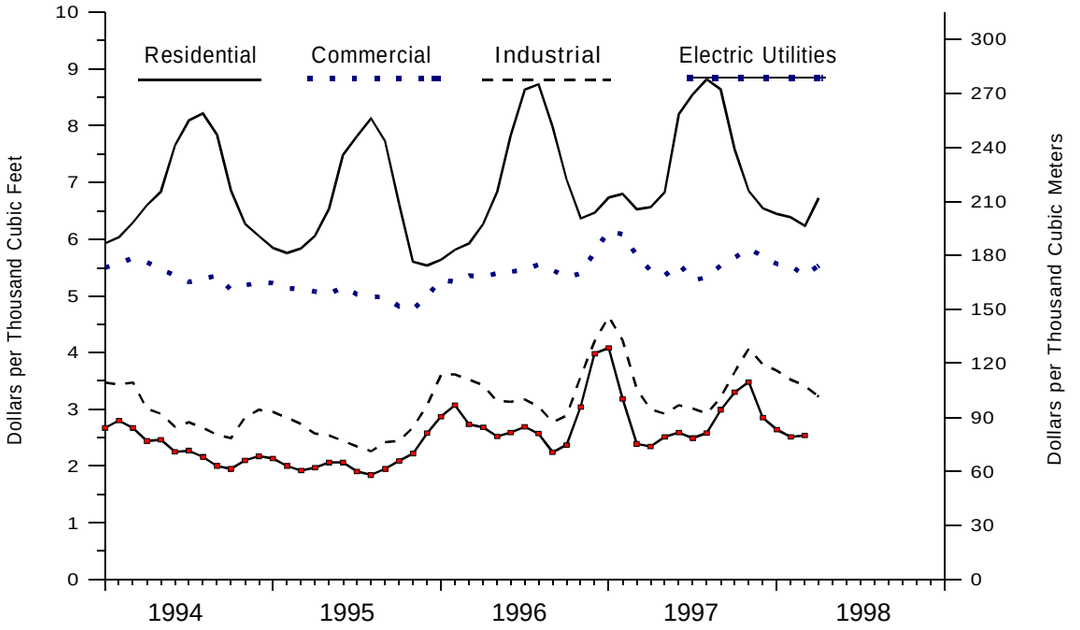
Year and Month	Wellhead Price[a]	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total[b]	Price	% of Total[b]	
1992 Annual Average	1.74	3.01	5.89	4.88	83.2	2.84	30.3	2.36
1993 Annual Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996								
January	2.05	3.14	5.64	5.29	83.2	3.61	22.0	2.87
February	1.89	3.16	5.82	5.25	83.3	3.61	22.7	3.07
March	1.95	3.17	5.93	5.36	81.8	3.52	22.3	2.73
April	2.08	3.22	6.27	5.34	79.5	3.42	20.5	2.68
May	2.01	3.18	6.84	5.40	74.6	3.14	18.7	2.52
June	2.08	3.41	7.83	5.43	70.0	3.13	16.7	2.59
July	2.25	3.49	8.64	5.46	67.8	3.17	18.6	2.69
August	2.10	3.46	8.73	5.56	66.3	3.05	17.4	2.57
September	1.85	3.05	7.99	5.46	67.1	2.77	16.9	2.24
October	1.94	2.94	7.05	5.33	69.1	2.89	17.2	2.37
November	2.50	3.46	6.37	5.40	75.7	3.57	18.5	3.04
December	3.26	4.18	6.47	5.78	78.1	4.20	20.0	3.98
Annual Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997								
January	E3.42	4.27	6.74	6.15	R77.9	R4.64	19.4	4.08
February	E2.44	3.78	6.80	6.09	76.9	R4.21	17.7	3.18
March	E1.61	3.06	6.53	5.72	R73.0	3.36	17.4	2.39
April	E1.64	2.94	6.57	5.45	R70.8	R3.00	R16.9	2.34
May	E1.87	3.16	6.83	5.36	63.8	2.92	16.6	2.51
June	E2.01	R3.40	8.21	R5.57	R60.2	3.07	R15.9	2.59
July	E1.91	R3.54	8.55	5.28	R58.6	R3.01	R14.1	2.49
August	E1.95	R3.43	R8.82	R5.33	R56.3	2.92	R13.9	2.58
September	E2.22	3.60	R8.64	5.54	R58.0	3.21	13.8	2.99
October	E2.70	R3.92	7.59	5.68	R61.8	3.66	15.2	3.30
November	E2.77	R3.93	6.85	5.84	67.5	4.07	16.1	3.48
December	E2.17	R3.49	6.55	R5.70	R72.0	R3.79	15.1	2.85
Annual Average	E2.23	R3.61	R6.93	R5.76	R69.4	R3.54	R16.1	2.81
1998								
January	E1.79	3.28	R6.45	R5.57	R72.3	R3.68	R15.0	2.64
February	E1.64	R3.08	6.39	5.54	R70.5	R3.52	R15.3	2.51
March	E1.86	3.22	6.24	5.36	71.6	3.41	R16.5	2.54
April	E2.05	3.22	6.73	5.54	67.0	3.22	15.0	NA
1998 YTD[c]	E1.84	3.20	6.43	5.50	70.7	3.46	15.5	2.57
1997 YTD	E2.28	3.63	6.68	5.92	75.2	3.85	17.9	3.13
1996 YTD	1.99	3.17	5.86	5.30	82.2	3.54	21.9	2.88

[a] See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.
[b] Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 24 for breakdown by State.
[c] Year-to-date price represents months for which price information is available in the current year.
R = Revised Data.
E = Estimated Data.
NA = Not Available.

Notes: Data for 1991 through 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

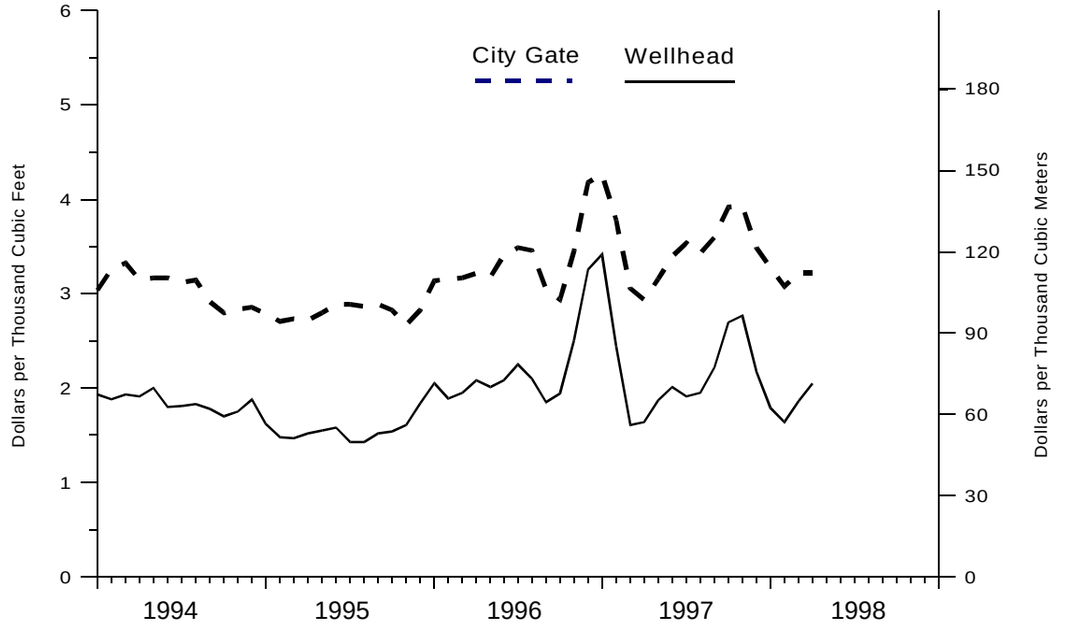
Sources: 1990-1996: Energy Information Administration (EIA) *Natural Gas Annual 1996.* 1997 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1997 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998



Source: Table 4.

Figure 4. Average Price of Natural Gas in the United States, 1994-1998



Source: Table 4.

Table 5. U.S. Natural Gas Imports, by Country, 1992-1998

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Algeria		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	2,094,387	1.84	—	—	43,116	2.54	—	—	2,137,504	1.85
1993 Total	2,266,751	2.02	1,678	1.94	81,685	2.20	—	—	2,350,115	2.03
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	—	—	2,623,839	1.87
1995 Total	2,816,408	1.48	6,722	1.53	17,918	2.30	—	—	2,841,048	1.49
1996										
January	259,656	2.08	1,499	2.03	2,460	2.81	—	—	263,615	2.09
February	230,546	1.94	698	2.14	2,512	2.79	—	—	233,756	1.95
March	237,668	1.91	1,259	2.34	2,599	3.06	—	—	241,526	1.92
April	230,928	1.86	1,369	2.18	4,559	2.43	—	—	236,857	1.87
May	245,522	1.70	4,024	2.14	2,612	2.58	—	—	252,158	1.72
June	225,875	1.70	711	2.35	0	—	—	—	226,587	1.70
July	232,908	1.82	1,313	2.58	2,642	3.00	—	—	236,864	1.84
August	235,199	1.80	30	1.70	2,629	2.56	—	—	237,858	1.80
September	234,206	1.60	770	1.69	0	—	[a]2,524	3.34	237,500	1.62
October	241,294	1.68	1,110	2.37	5,116	2.96	—	—	247,520	1.71
November	245,795	2.25	982	2.85	5,031	2.59	—	—	251,807	2.26
December	263,681	3.00	96	3.30	5,164	2.51	[a]2,425	3.57	271,366	3.00
Total	2,883,277	1.96	13,862	2.25	35,325	2.70	4,949	3.45	2,937,413	1.97
1997										
January	264,919	2.93	1,375	3.08	7,560	2.78	[a]2,417	3.68	276,271	2.93
February	233,569	2.49	2,248	2.44	7,667	3.00	—	—	243,484	2.51
March	254,416	2.10	2,737	1.84	2,530	2.98	—	—	259,683	2.11
April	232,114	1.72	189	1.92	2,557	2.23	—	—	234,860	1.72
May	232,065	1.82	2,382	2.03	2,552	2.20	[b]2,455	2.59	239,455	1.83
June	228,505	1.82	1,694	2.21	5,059	2.48	—	—	235,258	1.83
July	225,528	1.86	1,088	1.98	5,026	2.48	—	—	231,642	1.87
August	241,036	1.86	6	2.35	7,535	2.43	—	—	248,578	1.88
September	237,347	1.93	29	2.47	5,030	2.41	[b]2,337	2.88	244,743	1.95
October	240,450	2.32	965	2.92	5,050	2.70	—	—	246,466	2.33
November	253,196	2.56	1,781	2.82	7,542	2.89	[b]4,893	3.07	267,412	2.58
December	253,134	2.32	1,810	2.12	7,567	2.88	—	—	262,511	2.33
Total	2,896,280	2.16	16,304	2.31	65,675	2.67	12,103	3.06	2,990,363	2.17
1998										
January	273,189	[R]2.02	[R]56	[R]2.11	10,105	[R]2.89	—	—	[R]283,351	[R]2.05
February	235,288	[R]1.95	[R]2,824	[R]1.97	7,607	[R]2.78	[Rb]2,171	[R]3.99	[R]247,890	[R]1.99
March	[R]258,067	[R]1.99	[R]382	[R]2.20	5,166	[R]3.19	—	—	[R]263,615	[R]2.01
April	248,000	NA	[E]1,470	NA	2,549	NA	—	—	[E]252,019	NA
May	245,000	NA	[E]1,575	NA	7,596	NA	—	—	[E]254,171	NA
1998 YTD	1,259,544	NA	[E]6,307	NA	33,024	NA	2,171	3.99	[E]1,301,046	NA
1997 YTD	1,217,084	2.23	8,931	2.23	22,866	2.75	4,873	3.13	1,253,754	2.24
1996 YTD	1,204,320	1.90	8,849	2.16	14,743	2.69	0	—	1,227,912	1.91

[a] Received from the United Arab Emirates.
[b] Received from Australia.
[Rb] See footnotes R and b.
[R] = Revised Data.
[E] = Estimated Data.
NA = Not Available.
— = Not Applicable.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports.* Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1992-1998

(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Total	
	Canada		Mexico		Japan		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	67,777	1.83	95,973	1.90	52,532	3.43	216,282	2.25
1993 Total	44,518	2.14	39,676	2.02	55,989	3.34	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	65,283	3.41	154,119	2.39
1996								
January	7,044	3.13	1,607	1.98	5,534	3.38	14,186	3.10
February	5,207	2.71	2,000	1.82	5,621	3.35	12,828	2.85
March	6,616	2.79	2,860	1.81	5,642	3.55	15,118	2.88
April	2,430	2.21	1,924	1.69	5,654	3.57	10,008	2.88
May	2,809	2.15	1,899	1.84	3,750	3.61	8,458	2.73
June	3,001	2.25	3,486	2.16	5,651	3.65	12,138	2.87
July	3,777	2.45	3,062	2.24	7,546	3.66	14,385	3.04
August	2,197	2.30	9,176	2.11	5,663	3.67	17,036	2.65
September	2,514	1.94	2,389	1.73	5,663	3.73	10,566	2.85
October	4,311	1.97	1,990	1.85	5,589	3.84	11,889	2.83
November	6,776	2.77	1,533	2.56	5,670	4.01	13,979	3.25
December	5,222	3.67	1,914	3.72	5,665	3.73	12,801	3.70
Total	51,905	2.67	33,840	2.11	67,648	3.65	153,393	2.97
1997								
January	4,193	4.08	2,220	4.07	5,604	4.25	12,017	4.16
February	5,169	3.02	1,666	2.32	5,596	4.29	12,431	3.50
March	9,117	2.06	1,493	1.55	5,675	4.22	16,285	2.76
April	5,167	1.78	3,046	1.83	5,660	4.06	13,873	2.72
May	4,108	2.09	2,177	1.96	3,812	3.98	10,097	2.77
June	3,162	2.28	2,579	2.14	3,786	4.22	9,527	3.01
July	3,257	2.14	3,122	2.17	3,756	3.66	10,135	2.71
August	3,820	2.16	6,282	2.37	7,532	3.62	17,634	2.85
September	3,128	2.37	6,070	2.60	3,767	3.72	12,965	2.87
October	2,450	2.85	4,182	2.87	5,675	3.58	12,307	3.19
November	5,597	3.10	1,782	3.15	5,691	3.66	13,070	3.35
December	7,318	2.58	3,650	2.29	5,631	3.58	16,599	2.86
Total	56,486	2.52	38,269	2.46	62,187	3.90	156,942	3.05
1998								
January	[R]5,056	[R]2.53	[R]4,257	[R]2.11	7,446	[R]3.67	[R]16,759	[R]2.93
February	[R]4,474	[R]2.14	[R]3,119	[R]2.06	3,726	[R]3.42	[R]11,319	[R]2.54
March	[R]7,818	[R]2.25	[R]4,204	[R]2.14	7,435	[R]3.66	[R]19,457	[R]2.76
April	[RE]5,800	NA	[RE]3,860	NA	5,702	NA	[RE]15,362	NA
May	[E]5,800	NA	[E]3,860	NA	1,891	NA	[E]11,551	NA
1998 YTD	[E]28,948	NA	[E]19,300	NA	26,200	NA	[E]74,448	NA
1997 YTD	27,754	2.50	10,602	2.36	26,348	4.17	64,704	3.16
1996 YTD	24,107	2.74	10,290	1.82	26,201	3.48	60,598	2.90

[R] = Revised Data.
[E] = Estimated Data.
[RE] = Revised Estimated Data.
NA = Not Available.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998

(Million Cubic Feet)

Year and Month	Alabama[b]	Alaska	Arizona	California	Colorado	Florida	Kansas
1992 Total	355,099	443,597	771	365,632	323,041	6,657	658,007
1993 Total	388,024	430,350	597	315,851	400,985	7,085	686,347
1994 Total	515,272	555,402	752	309,427	453,207	7,486	712,730
1995 Total	519,661	469,550	558	279,555	523,084	6,463	721,436
1996							
January	45,653	44,655	41	20,714	48,619	518	62,976
February	42,668	40,433	42	22,910	45,504	493	62,683
March	45,334	43,738	45	24,686	47,843	460	63,027
April	43,868	39,694	36	23,988	45,293	456	60,858
May	45,160	36,348	39	24,091	46,893	483	62,194
June	43,319	37,334	45	23,281	45,212	503	56,318
July	43,257	37,272	30	24,495	45,570	500	57,095
August	43,873	37,239	43	24,547	51,269	540	55,144
September	42,834	38,039	31	23,826	45,437	537	55,563
October	42,200	41,204	34	24,261	50,245	468	57,589
November	45,395	40,706	37	24,493	49,824	517	58,460
December	47,278	44,166	40	25,203	50,363	531	60,890
Total	530,841	480,828	463	286,494	572,071	6,006	712,796
1997							
January	32,136	45,409	46	24,427	47,843	525	60,197
February	29,307	40,017	41	23,877	47,967	510	54,234
March	32,291	43,559	42	23,879	52,372	607	60,099
April	32,077	39,267	39	23,223	48,571	552	57,085
May	31,326	35,821	36	23,690	48,444	538	61,661
June	30,137	37,634	28	23,507	44,744	448	57,731
July	31,331	35,680	31	23,981	50,319	512	58,234
August	30,914	36,425	30	23,831	52,235	503	53,374
September	33,496	34,854	29	23,792	50,425	517	49,658
October	34,689	39,929	34	24,490	51,450	450	53,815
November	33,848	41,052	57	27,505	45,507	437	54,152
December	33,386	44,965	39	24,896	55,769	489	[E]58,413
Total	384,937	474,612	451	291,098	595,647	6,087	[E]678,654
1998							
January	32,739	43,715	43	24,810	53,025	479	53,834
February	29,230	[R]38,016	42	21,719	[R]51,770	436	[E]51,029
March	33,505	41,026	53	22,869	[E]48,299	466	[E]52,430
1998 YTD	95,474	122,758	137	69,398	[E]153,094	1,380	[E]157,292
1997 YTD	93,734	128,985	129	72,183	148,183	1,641	174,530
1996 YTD	133,656	128,826	128	68,310	141,965	1,471	188,686

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998

(Million Cubic Feet) — Continued

Year and Month	Louisiana[b]	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1992 Total	4,914,300	194,815	91,697	53,867	1,268,863	54,883	2,017,356
1993 Total	4,991,138	204,635	80,695	54,528	1,409,429	59,851	2,049,942
1994 Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805	1,934,864
1995 Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468	1,811,734
1996							
January	437,274	21,912	8,089	4,503	135,594	4,276	143,693
February	412,611	18,686	7,386	4,266	126,370	3,880	139,115
March	446,371	11,208	8,385	4,443	138,091	4,164	131,701
April	436,014	32,072	8,225	4,098	132,572	4,122	147,949
May	451,148	18,021	9,026	4,244	138,946	4,273	149,425
June	434,668	23,572	8,983	3,496	131,778	3,990	143,675
July	449,052	27,119	9,335	3,603	125,193	4,047	146,451
August	449,461	23,261	9,193	4,050	126,967	4,096	148,463
September	431,768	20,208	8,641	4,172	122,040	4,185	143,302
October	421,252	20,374	8,996	4,668	123,570	4,246	150,322
November	427,566	16,081	8,487	4,521	124,377	4,216	146,828
December	443,563	13,227	8,518	4,933	128,590	4,178	143,965
Total	5,240,747	245,740	103,263	50,996	1,554,087	49,674	1,734,887
1997							
January	466,044	35,849	8,089	4,638	125,382	4,035	144,608
February	425,451	17,314	7,807	4,380	125,445	3,921	134,742
March	[E]470,994	25,435	8,470	4,608	124,026	4,313	146,588
April	[E]458,943	13,281	8,120	4,320	123,657	4,176	136,080
May	[E]469,736	40,848	8,611	4,166	122,869	4,542	141,818
June	461,455	19,934	8,893	3,792	123,509	4,341	137,044
July	[E]468,677	41,068	8,636	4,080	123,507	4,420	143,141
August	[E]469,613	19,081	9,626	4,172	123,966	4,454	146,381
September	461,975	[E]19,546	9,162	[E]4,348	124,586	4,276	141,645
October	458,564	20,966	10,084	[E]4,959	124,710	4,507	148,583
November	457,192	26,661	9,683	[E]4,994	[E]125,632	4,434	146,638
December	460,418	30,610	9,955	[E]5,260	[E]129,777	4,634	145,859
Total	[E]5,529,062	[E]310,591	107,137	[E]53,718	[E]1,497,069	52,053	1,713,127
1998							
January	463,097	28,439	9,639	[E]5,173	142,312	4,623	145,522
February	422,324	28,259	8,574	[E]4,754	142,383	4,020	134,651
March	468,307	30,719	9,781	[E]5,056	[E]140,773	4,337	142,541
1998 YTD	1,353,728	87,417	27,994	[E]14,982	[E]425,468	12,979	422,714
1997 YTD	[E]1,362,489	78,597	24,366	13,626	374,853	12,270	425,938
1996 YTD	1,296,255	51,806	23,860	13,211	400,055	12,320	414,509

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas[c]	Utah	Wyoming	Other[a] States	U.S. Total
1992 Total	2,580	6,145,862	171,293	842,576	800,913	18,711,808
1993 Total	4,003	6,249,624	225,401	634,957	788,472	18,981,915
1994 Total	3,221	6,353,844	270,858	696,018	774,724	19,709,525
1995 Total	1,923	6,330,048	241,290	673,775	759,728	19,506,474
1996						
January	120	545,658	19,998	58,691	69,638	1,672,623
February	75	512,557	18,027	56,037	66,726	1,580,472
March	105	552,700	21,650	57,270	72,373	1,673,596
April	121	529,015	20,864	54,662	65,643	1,649,552
May	140	547,843	21,035	52,805	67,061	1,679,176
June	132	533,168	20,759	59,346	64,752	1,634,329
July	146	557,986	20,573	55,519	64,500	1,671,743
August	117	550,499	21,137	54,567	66,523	1,670,989
September	132	529,524	21,589	51,949	65,361	1,609,140
October	133	543,264	22,152	53,649	69,163	1,637,792
November	113	517,147	21,606	53,990	70,997	1,615,362
December	102	529,659	21,376	57,551	71,875	1,656,019
Total	1,439	6,449,022	250,767	666,036	814,612	19,750,793
1997						
January	105	560,683	21,782	53,272	[E]69,157	[E]1,704,228
February	98	509,089	19,115	45,143	[E]64,219	[E]1,552,675
March	101	560,042	21,912	62,872	[E]68,518	[E]1,710,728
April	102	531,761	19,570	60,661	[E]64,329	[E]1,625,816
May	102	549,243	22,053	62,147	[E]64,899	[E]1,692,549
June	97	527,306	19,815	55,384	[E]64,227	[E]1,620,026
July	98	533,930	21,711	60,873	[E]64,033	[E]1,674,262
August	99	539,321	21,024	[E]62,134	[E]65,381	[E]1,662,565
September	86	520,843	22,007	60,378	[E]63,629	[E]1,625,253
October	97	535,219	23,006	66,373	[E]67,561	[E]1,669,486
November	91	521,531	22,840	63,949	[E]67,586	[E]1,653,789
December	96	542,516	22,307	[E]66,746	[E]72,224	[E]1,708,357
Total	1,173	6,431,484	257,139	[E]719,932	[E]795,764	[E]19,899,735
1998						
January	90	542,462	21,826	66,074	[E]70,408	[E]1,708,309
February	79	491,530	[R]21,758	53,970	[E]65,555	[RE]1,570,099
March	96	541,311	[E]25,808	65,704	[E]70,223	[E]1,703,303
1998 YTD	265	1,575,303	[E]69,392	185,748	[E]206,186	[E]4,981,711
1997 YTD	304	1,629,814	62,808	161,286	[E]201,894	[E]4,967,631
1996 YTD	301	1,610,916	59,675	171,998	208,737	4,926,691

[a] Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1997 monthly values for these States are estimated.

[b] All data for 1991 through 1996 include Federal Offshore production. For 1997 and 1998, data for Alabama exclude Federal Offshore production and data for Louisiana include both the Louisiana and Alabama portions of Federal Offshore production.

[c] Federal offshore production volumes are included.

[R] = Revised Data.

[E] = Estimated Data.

[RE] = Revised Estimated Data.

Notes: Data for 1991 through 1996 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1991-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*.1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State, March 1998

(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed[a]	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	36,290	753	37,043	1,222	2,197	120	33,505
Alaska	16,490	275,417	291,907	250,290	0	591	41,026
Arizona	50	3	53	0	0	0	53
California	6,451	26,917	33,368	10,266	156	76	22,869
Colorado	E42,380	E6,583	E48,964	E545	0	E119	E48,299
Florida	0	526	526	0	60	0	466
Kansas	E48,366	E4,206	E52,572	E89	0	E53	E52,430
Louisiana	412,107	61,952	474,059	3,718	0	2,034	468,307
Michigan	25,002	6,250	31,252	220	0	313	30,719
Mississippi	10,327	991	11,319	602	691	245	9,781
Montana	E4,489	E611	E5,100	E6	0	E38	E5,056
New Mexico	E132,880	E23,034	E155,914	E949	E13,939	E253	E140,773
North Dakota	1,531	3,139	4,670	0	5	329	4,337
Oklahoma	129,722	12,819	142,541	0	0	0	142,541
Oregon	113	0	113	3	14	0	96
Texas	479,959	116,136	596,095	38,576	13,700	2,508	541,311
Utah	E22,360	E4,450	E26,810	E51	0	E951	E25,808
Wyoming	101,259	5,345	106,604	12,916	13,983	14,001	65,704
Other States	E66,284	E4,856	E71,140	E209	0	E708	E70,223
Total	E1,536,060	E553,988	E2,090,048	E319,663	E44,744	E22,337	E1,703,303

[a] See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

E = Estimated Data.

Notes: All monthly data are considered preliminary until publication of the *Natural Gas Annual* for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Source: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1992-1998

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[b]	Volume	Percent	Injections	Withdrawals	Net Withdrawals[c]
1992 Total[a]	4,044	2,597	6,641	-227	-8.0	2,555	2,724	168
1993 Total[a]	4,327	2,322	6,649	-275	-10.6	2,760	2,717	-43
1994 Total[a]	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995 Total[a]	4,349	2,153	6,503	-453	3.1	2,566	2,974	408
1996								
January	4,354	1,462	5,817	-583	-28.5	49	749	700
February	4,349	1,021	5,369	-521	-33.8	97	544	447
March	4,290	758	5,048	-574	-43.1	80	403	323
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
Total	—	—	—	—	—	2,906	2,911	6
1997								
January	4,348	1,496	5,844	34	2.3	69	752	684
February	4,342	1,140	5,482	120	11.7	55	413	358
March	4,346	991	5,337	233	30.7	131	285	155
April	4,342	1,051	5,393	197	23.1	205	146	-58
May	4,343	1,362	5,705	201	17.3	362	41	-321
June	4,357	1,730	6,087	201	13.2	405	41	-364
July	4,356	2,014	6,369	116	6.1	359	78	-281
August	4,357	2,336	6,693	92	4.1	378	56	-322
September	4,360	2,672	7,032	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	295	84	-211
November	4,360	2,698	7,058	149	5.9	113	302	189
December	4,350	2,170	6,520	-2	-0.1	45	579	533
Total	—	—	—	—	—	2,796	2,823	27
1998								
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
April	4,336	1,381	5,718	330	31.4	277	78	-198
May	4,338	1,773	6,111	412	30.2	435	42	-393
June(STIFS)	[RE]4,338	[RE]2,115	[RE]6,453	[RE]385	[RE]22.2	NA	NA	[E]-342
July(STIFS)	[E]4,338	[E]2,495	[E]6,833	[E]482	[E]23.9	NA	NA	[E]-380

[a] Total as of December 31.

[b] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; and 1996 - 8,159.

[c] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[E] = Estimated Data.

[RE] = Revised Estimated Data.

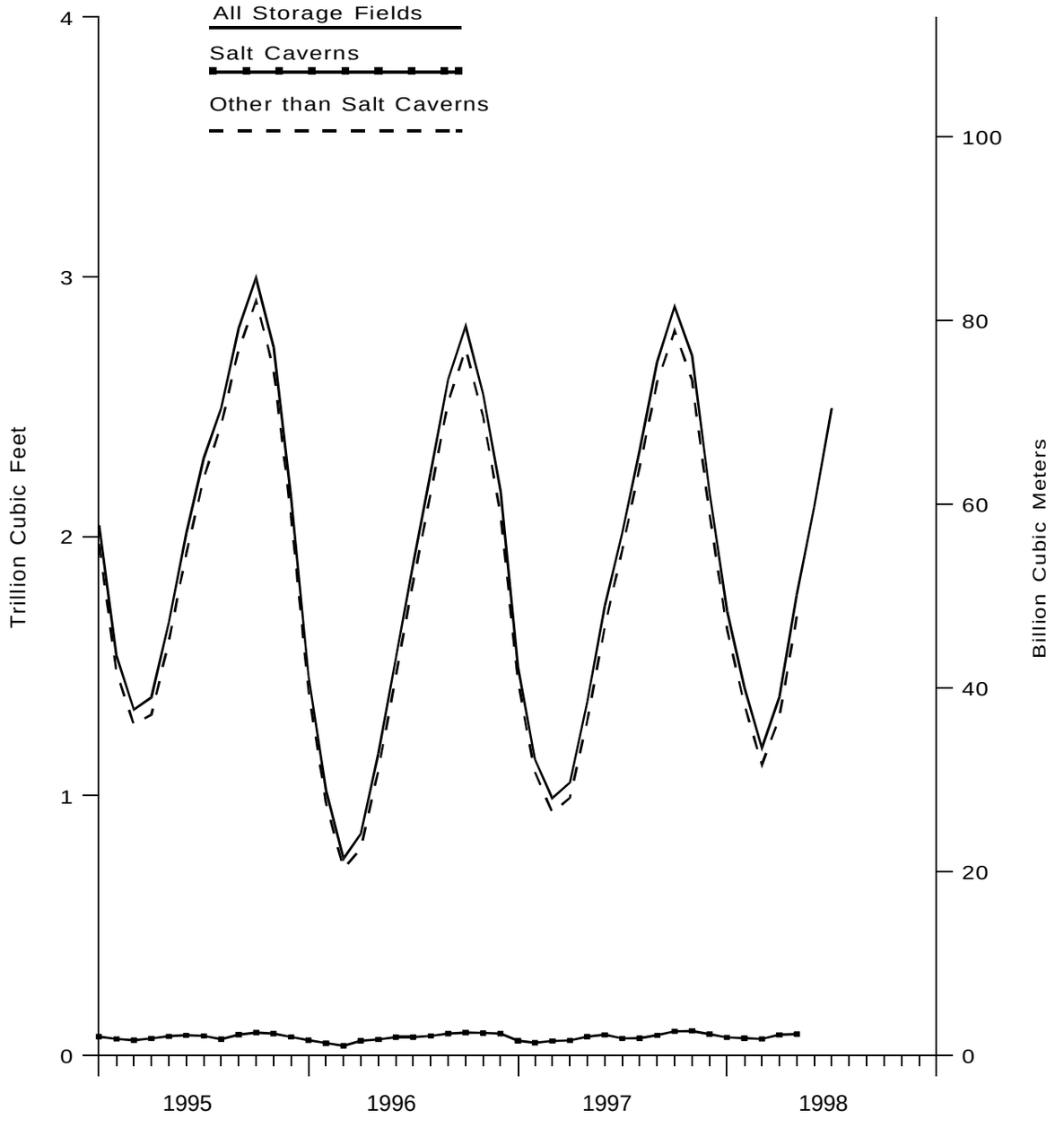
NA = Not Available.

— = Not Applicable.

Notes: Data for 1992 through 1996 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Working Gas in Underground Natural Gas Storage in the United States, 1995-1998



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1995-1998

(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals[a]
October 1995	4,338	2,996	7,334	--	--	--	--	--
1995-96 Heating Season								
November	4,342	2,728	7,070	-249	-8.4	96	367	272
December	4,349	2,153	6,503	-453	-17.4	53	635	582
January	4,354	1,462	5,817	-583	-28.5	49	749	700
February	4,349	1,021	5,369	-521	-33.8	97	544	447
March	4,290	758	5,048	-574	-43.1	80	403	323
Total	--	--	--	--	--	375	2,698	2,323
1996 Refill Season								
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
Total	--	--	--	--	--	2,502	401	-2,102
1996-97 Heating Season								
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
January	4,348	1,496	5,844	34	2.3	69	752	684
February	4,342	1,140	5,482	120	11.7	55	413	358
March	4,346	991	5,337	233	30.7	131	285	155
Total	--	--	--	--	--	431	2,266	1,835
1997 Refill Season								
April	4,342	1,051	5,393	197	23.1	205	146	-58
May	4,343	1,362	5,705	201	17.3	362	41	-321
June	4,357	1,730	6,087	201	13.2	405	41	-364
July	4,356	2,014	6,369	116	6.1	359	78	-281
August	4,357	2,336	6,693	92	4.1	378	56	-322
September	4,360	2,672	7,032	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	295	84	-211
Total	--	--	--	--	--	2,384	491	-1,893
1997-98 Heating Season								
November	4,360	2,698	7,058	149	5.9	113	302	189
December	4,350	2,170	6,520	-2	-0.1	45	579	533
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
Total	--	--	--	--	--	436	2,166	1,730
1998 Refill Season								
April	4,336	1,381	5,718	330	31.4	277	78	-198
May	4,338	1,773	6,111	412	30.2	435	42	-393
June(STIFS)	[RE]4,338	[RE]2,115	[RE]6,453	[RE]385	[RE]22.2	NA	NA	[E]-342
July(STIFS)	[E]4,338	[E]2,495	[E]6,833	[E]482	[E]23.9	NA	NA	[E]-380

[a] Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

[E] = Estimated Data.

[RE] = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.In January 1995, 2 billion cubic feet was added to base gas for two new respondents. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1996-1998

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[a]	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	63	59	122	-14	-19.3	23	41	17
February	63	48	111	-17	-26.2	23	33	10
March	63	38	101	-21	-35.2	21	32	11
April	63	57	120	-9	-13.7	30	10	-20
May	63	62	126	-11	-15.1	19	13	-6
June	63	71	135	-7	-8.9	21	12	-9
July	60	71	131	-5	-6.7	20	14	-6
August	60	76	136	13	20.5	21	16	-5
September	60	85	145	4	5.0	23	13	-9
October	60	88	148	0	0.4	17	14	-3
November	64	87	151	3	4.0	16	20	5
December	64	85	149	14	18.8	25	28	2
Total	—	—	—	—	—	258	246	-13
1997								
January	65	57	122	-2	-3.1	21	50	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	21	19	-3
May	65	73	138	11	17.3	27	13	-14
June	66	80	145	8	11.7	22	15	-7
July	65	66	131	-5	-7.5	15	29	14
August	65	67	132	-9	-12.4	23	22	-1
September	65	78	143	-7	-8.7	26	14	-12
October	66	93	159	5	5.6	30	14	-16
November	67	95	162	8	9.1	25	23	-2
December	67	82	150	-3	-3.1	18	31	12
Total	—	—	—	—	—	266	270	4
1998								
January	66	70	136	13	22.4	17	31	14
February	65	67	132	18	35.9	17	21	3
March	68	64	132	8	14.4	23	28	6
April	68	80	148	22	37.9	29	11	-17
May	68	83	150	9	12.9	26	22	-3

[a] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1995 - 5,314; and 1996 - 7,952.

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1996-1998

(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[a]	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	4,291	1,404	5,695	-569	-28.8	26	708	682
February	4,286	973	5,259	-504	-34.1	73	510	437
March	4,228	720	4,948	-553	-43.4	59	371	312
April	4,249	797	5,046	-516	-39.3	197	102	-95
May	4,268	1,099	5,367	-496	-31.1	354	32	-322
June	4,277	1,458	5,735	-478	-24.7	390	23	-366
July	4,276	1,827	6,103	-399	-17.9	398	34	-363
August	4,272	2,169	6,441	-263	-10.8	380	39	-341
September	4,277	2,520	6,797	-201	-7.4	376	19	-357
October	4,275	2,722	6,997	-186	-6.4	259	59	-200
November	4,275	2,462	6,737	-183	-6.9	75	333	259
December	4,277	2,087	6,364	6	0.3	61	433	372
Total	—	—	—	—	—	2,647	2,665	18
1997								
January	4,283	1,439	5,722	36	2.5	48	702	654
February	4,283	1,091	5,374	118	12.1	40	390	350
March	4,281	935	5,216	215	29.9	109	270	161
April	4,277	993	5,270	196	24.6	184	128	-56
May	4,278	1,289	5,567	190	17.3	335	28	-307
June	4,291	1,651	5,942	193	13.2	383	26	-357
July	4,290	1,948	6,238	121	6.6	344	49	-295
August	4,291	2,270	6,561	101	4.7	355	34	-321
September	4,295	2,595	6,890	75	3.0	354	30	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,293	2,603	6,897	141	5.7	88	279	191
December	4,283	2,088	6,371	0	0.0	27	548	521
Total	—	—	—	—	—	2,530	2,553	23
1998								
January	4,278	1,641	5,920	202	14.0	51	504	453
February	4,273	1,351	5,624	260	23.9	56	352	296
March	4,271	1,120	5,391	185	19.8	113	349	236
April	4,269	1,301	5,570	308	31.0	248	67	-181
May	4,270	1,691	5,961	402	31.2	409	20	-390

[a] Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1995 - 5,314; and 1996 - 7,952.

— = Not Applicable.

Notes: Data for 1995 and 1996 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet)

State	1998					1997	
	May	April	March	February	January	Total	December
Alabama	-144	-245	248	187	396	-162	243
Arkansas	-1,046	-471	1,039	875	1,057	251	1,526
California	-29,210	-10,710	-2,257	26,766	29,805	14,425	58,445
Colorado	-6,040	3,534	3,928	6,337	3,510	384	5,111
Illinois	-25,967	-293	28,186	36,082	58,036	-11,140	45,338
Indiana	-446	917	4,249	3,322	4,144	365	4,036
Iowa	-3,600	348	6,692	5,335	18,905	-6,207	16,932
Kansas	-19,324	-6,954	14,438	8,180	15,103	-12,416	12,485
Kentucky	-11,793	-2,480	7,768	9,981	9,559	3,182	10,772
Louisiana	-22,794	-21,191	7,400	5,164	21,574	-7,721	43,862
Maryland	-808	-1,127	1,631	2,745	3,236	-148	1,312
Michigan	-69,296	-31,779	55,388	45,886	84,170	-702	77,495
Minnesota	0	159	416	203	444	-303	5
Mississippi	-3,438	-2,757	2,405	4,251	7,431	3,703	8,471
Missouri	-460	48	423	10	458	-453	228
Montana	-2,571	224	3,017	2,554	4,421	11,955	3,168
Nebraska	-860	754	1,090	355	376	-1,545	944
New Mexico	-1,120	287	658	-130	-412	2,065	2,500
New York	-11,267	-3,673	7,977	9,548	11,582	-131	10,285
Ohio	-35,968	-14,906	28,619	34,023	34,810	-6,964	40,390
Oklahoma	-23,277	-21,343	7,159	737	21,199	-10,892	24,727
Oregon	0	81	934	1,253	540	-1,019	1,036
Pennsylvania	-57,800	-32,842	38,957	49,786	57,788	28,252	53,756
Texas	-27,286	-40,395	-9,062	-3,341	35,935	11,896	54,705
Utah	-7,364	-596	1,199	6,783	7,613	-7,571	13,169
Washington	-3,932	1,544	3,329	4,131	-58	-904	3,177
West Virginia	-26,003	-14,607	22,818	36,285	30,647	17,744	36,345
Wyoming	-1,344	89	2,611	2,059	3,990	963	3,015
AGA Regions							
Producing	-98,285	-92,824	24,038	15,735	101,887	-13,114	148,276
Eastern Consuming	-244,412	-99,884	204,045	233,545	314,105	22,091	298,078
Western Consuming	-50,461	-5,674	13,177	50,086	50,266	17,929	87,127
Total	-393,158	-198,382	241,260	299,366	466,258	26,906	533,481

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet) — Continued

State	1997						
	November	October	September	August	July	June	May
Alabama	243	-251	-262	-286	-43	-93	-271
Arkansas	651	271	-1,048	-1,234	-1,472	-1,340	-608
California	2,749	-11,834	-6,817	-8,032	-11,406	-23,191	-24,048
Colorado	2,545	458	-5,141	-4,488	-5,540	-5,257	-5,328
Illinois	2,735	-28,914	-36,161	-35,848	-32,648	-28,038	-23,880
Indiana	-925	-3,135	-4,603	-3,757	-3,309	-1,914	-110
Iowa	554	-8,358	-12,762	-10,938	-8,777	-8,361	-3,473
Kansas	8,499	-7,912	-13,678	-11,439	-3,703	-12,195	-9,699
Kentucky	4,043	-2,925	-7,983	-6,520	-7,391	-8,991	-7,821
Louisiana	21,196	-23,999	-29,222	-15,259	-11,713	-19,702	-19,500
Maryland	53	-2,283	-2,766	-2,292	-1,497	-1,657	-1,590
Michigan	53,120	-32,347	-64,478	-72,202	-74,634	-72,604	-46,126
Minnesota	4	0	-130	-137	-321	-312	-273
Mississippi	1,122	-2,145	-5,204	-3,115	709	-3,812	-5,552
Missouri	-207	-215	-240	-379	-433	-112	-1,200
Montana	2,753	1,015	-1,490	-2,339	-2,710	-1,633	-846
Nebraska	126	-66	-1,091	-964	-75	-797	-708
New Mexico	25	-1,305	-853	-328	587	-534	-1,228
New York	4,803	-2,343	-6,626	-11,544	-11,628	-10,571	-7,770
Ohio	15,498	-8,799	-23,418	-32,053	-34,093	-37,335	-34,081
Oklahoma	13,548	-19,571	-14,433	-8,317	-864	-8,028	-18,258
Oregon	-250	-93	-391	-1,123	-1,240	-1,602	-1,239
Pennsylvania	25,976	-16,030	-48,951	-44,991	-41,099	-49,619	-44,272
Texas	19,105	-30,561	-21,242	-13,220	10,013	-20,500	-27,751
Utah	2,721	-1,301	-3,235	-5,284	-8,117	-7,950	-4,255
Washington	90	707	-2,267	990	-490	-3,766	-5,880
West Virginia	6,670	-8,103	-18,997	-24,020	-26,065	-31,691	-23,964
Wyoming	1,918	-577	-2,424	-2,712	-3,393	-2,290	-1,119
AGA Regions							
Producing	64,145	-85,222	-85,680	-52,913	-6,442	-66,111	-82,596
Eastern Consuming	112,688	-113,768	-228,337	-245,796	-241,693	-251,783	-195,265
Western Consuming	12,530	-11,625	-21,894	-23,125	-33,218	-46,001	-42,987
Total	189,363	-210,615	-335,912	-321,834	-281,353	-363,895	-320,849

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet) — Continued

State	1997				1996		
	April	March	February	January	Total	December	November
Alabama	-130	-25	184	531	-1,224	761	129
Arkansas	178	342	1,006	1,978	64	644	562
California	-19,220	-441	19,742	38,477	51,292	14,985	-2,885
Colorado	5,569	2,069	4,862	5,523	-1,004	2,923	92
Illinois	-546	23,189	39,774	63,858	-15,109	35,109	15,523
Indiana	1,444	2,498	2,866	7,272	-1,801	3,290	-853
Iowa	1,627	2,953	8,469	15,926	-1,229	18,020	5,502
Kansas	-1,605	4,096	9,102	13,633	12,118	12,290	12,828
Kentucky	-343	4,166	8,068	18,108	-7,530	8,039	4,853
Louisiana	-3,923	-18,817	21,080	48,276	10,964	32,273	29,327
Maryland	133	1,903	2,662	5,873	24	958	1,424
Michigan	-13,752	53,314	71,108	120,403	-31,671	83,640	61,160
Minnesota	-31	188	117	588	-30	218	30
Mississippi	442	-2,306	2,924	12,169	-12,758	4,658	5,707
Missouri	56	1,174	-252	1,126	-48	76	306
Montana	1,810	2,591	3,983	5,651	11,725	5,512	4,760
Nebraska	-43	-241	504	867	-1,489	1,108	479
New Mexico	583	501	1,527	591	5,338	-823	607
New York	-1,700	9,210	10,116	17,636	-13,367	8,151	6,347
Ohio	-1,385	21,557	28,120	58,636	-10,844	35,138	25,728
Oklahoma	-7,130	-8,092	7,912	27,616	22,961	20,970	17,468
Oregon	543	920	1,078	1,341	783	1,240	552
Pennsylvania	-3,306	50,263	52,298	94,228	-59,533	25,003	33,464
Texas	-17,395	-21,183	24,869	55,056	63,869	24,153	12,557
Utah	-2,150	-2,620	2,520	8,931	12,955	9,164	4,651
Washington	-66	3,217	1,798	1,587	2,067	1,746	462
West Virginia	1,715	23,312	28,900	53,643	-35,844	21,644	19,884
Wyoming	127	1,082	2,976	4,361	5,056	3,529	2,903
AGA Regions							
Producing	-28,850	-45,460	68,420	159,319	102,555	94,165	79,056
Eastern Consuming	-16,231	193,275	252,817	458,106	-179,663	240,936	173,946
Western Consuming	-13,416	7,006	37,076	66,459	82,844	39,316	10,566
Total	-58,498	154,821	358,313	683,884	5,735	374,417	263,567

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998

(Volumes in Million Cubic Feet) — Continued

State	1996					
	October	September	August	July	June	May
Alabama	-117	-440	-395	-205	-670	-367
Arkansas	-603	-1,153	-615	-744	-1,166	-1,302
California	-6,393	-6,822	15,439	7,028	-9,697	-23,523
Colorado	-87	-3,828	-3,722	-5,347	-5,035	-2,271
Illinois	-28,103	-36,529	-35,172	-35,480	-32,122	-26,711
Indiana	-2,715	-3,911	-6,115	-4,278	-2,398	-178
Iowa	-10,555	-12,536	-13,166	-12,393	-7,677	-1,640
Kansas	-6,005	-8,532	-8,265	-7,537	-12,192	-7,892
Kentucky	-2,826	-8,590	-10,071	-13,358	-14,231	-6,224
Louisiana	-15,704	-33,463	-32,218	-29,380	-16,986	-11,703
Maryland	-1,553	-1,677	-1,845	-1,887	-2,621	-2,154
Michigan	-49,100	-81,220	-82,649	-80,355	-78,794	-58,040
Minnesota	-35	-202	-213	-287	-294	-366
Mississippi	-3,369	-7,330	-7,868	-8,061	-6,662	-2,502
Missouri	-210	-204	-206	-240	-261	-1,319
Montana	336	-3,519	-3,501	-3,261	-3,577	782
Nebraska	600	-785	-1,346	-1,193	-1,924	-1,617
New Mexico	482	-1,873	363	811	48	21
New York	-2,750	-7,327	-12,585	-12,964	-12,079	-13,349
Ohio	-13,648	-23,807	-29,581	-36,092	-37,165	-30,055
Oklahoma	-10,345	-18,814	-14,973	-8,211	-10,949	-19,131
Oregon	170	-121	-509	-1,318	-1,365	-841
Pennsylvania	-15,621	-37,711	-52,038	-69,480	-62,061	-46,338
Texas	-22,072	-34,225	-18,108	-2,670	-13,902	-28,071
Utah	1,416	-2,204	-3,884	-6,821	-6,742	-5,533
Washington	1,648	-597	-1,965	-935	-3,317	-1,973
West Virginia	-15,242	-28,009	-19,913	-32,686	-29,535	-32,767
Wyoming	-272	-613	-771	-2,160	-1,760	-2,704
AGA Regions						
Producing	-57,617	-105,390	-81,685	-55,791	-61,809	-70,578
Eastern Consuming	-141,841	-242,746	-265,082	-300,612	-281,537	-220,759
Western Consuming	-3,217	-17,907	874	-13,101	-31,788	-36,431
Total	-202,675	-366,042	-345,894	-369,504	-375,133	-327,768

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1996 are final.All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 14. Activities of Underground Natural Gas Storage Operators, by State, May 1998

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	727	1,917	-103	-12.4	188	44
Arkansas	31,871	11,040	4,221	15,261	2,169	105.7	1,075	28
California	469,696	247,360	111,181	358,541	-14,136	-11.3	30,601	1,390
Colorado	99,600	48,140	18,837	66,977	1,286	7.3	6,749	709
Illinois	898,239	649,897	119,040	768,936	19,895	20.1	27,507	1,540
Indiana	113,210	73,701	18,387	92,088	1,406	8.3	1,160	715
Iowa	270,200	200,700	15,245	215,945	3,740	32.5	4,246	646
Kansas	298,666	191,033	61,565	252,597	15,937	34.9	20,399	1,074
Kentucky	219,908	109,106	68,543	177,649	6,210	10.0	12,147	355
Louisiana	559,473	265,685	157,187	422,871	50,170	46.9	32,581	9,786
Maryland	62,000	46,677	7,400	54,077	3,452	87.5	858	49
Michigan	1,052,236	420,781	357,904	778,685	109,551	44.1	72,011	2,715
Minnesota	7,000	4,623	1,151	5,774	-330	-22.3	0	0
Mississippi	134,012	77,458	34,226	111,684	-3,232	-8.6	6,384	2,946
Missouri	31,126	21,600	8,968	30,568	879	10.9	595	135
Montana	375,010	167,372	38,425	205,797	-6,404	-14.3	3,083	512
Nebraska	39,469	31,507	1,803	33,310	233	14.8	896	36
New Mexico	96,600	23,992	6,933	30,925	2,535	57.6	1,598	478
New York	173,979	103,042	43,282	146,324	14,459	50.2	11,473	206
Ohio	557,452	350,918	82,369	433,287	32,587	65.5	36,621	652
Oklahoma	395,087	233,761	97,103	330,864	28,116	40.8	25,844	2,567
Oregon	11,623	4,896	3,177	8,073	854	36.7	0	0
Pennsylvania	680,006	354,854	222,887	577,741	73,233	48.9	59,035	1,235
Texas	678,534	256,912	189,043	445,955	53,067	39.0	40,360	13,075
Utah	121,980	62,100	16,645	78,745	1,423	9.3	7,374	11
Washington	37,300	22,096	5,645	27,742	-3,507	-38.3	4,479	547
West Virginia	484,597	296,487	70,603	367,090	18,947	36.7	26,296	293
Wyoming	105,869	60,676	10,987	71,662	-836	-7.1	1,430	86
AGA Regions								
Producing	2,194,242	1,059,881	550,276	1,610,158	148,762	37.1	128,240	29,955
Eastern Consuming	4,585,702	2,660,458	1,017,158	3,677,616	284,488	38.8	253,033	8,621
Western Consuming	1,228,076	617,263	206,048	823,311	-21,650	-9.5	53,716	3,255
Total	8,008,021	4,337,603	1,773,482	6,111,085	411,599	30.2	434,989	41,831

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998

(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				April	March	February
Alabama	31,001	26,894	36,488	4,610	7,480	9,222
Alaska	6,724	6,965	7,814	1,239	1,529	1,716
Arizona	21,724	17,564	15,185	3,694	5,323	5,604
Arkansas	20,344	24,274	28,713	2,270	6,069	6,668
California	274,590	229,439	213,734	54,072	62,006	76,210
Colorado	NA	NA	61,288	NA	NA	NA
Connecticut	20,537	22,347	25,949	3,638	5,051	5,585
Delaware	4,862	5,367	6,239	846	1,248	1,360
District of Columbia	8,000	8,727	10,473	1,195	2,032	2,365
Florida	8,396	6,527	9,095	1,631	2,044	2,251
Georgia	62,524	54,796	71,437	8,015	16,312	18,031
Hawaii	206	187	202	49	49	52
Idaho	8,799	8,478	8,041	1,560	2,032	2,232
Illinois	219,274	271,999	292,502	33,014	54,697	53,146
Indiana	NA	94,976	104,061	NA	23,358	20,668
Iowa	40,276	45,949	48,782	5,821	10,634	10,261
Kansas	44,324	43,079	48,140	7,378	11,857	11,594
Kentucky	31,234	35,082	40,675	3,937	8,164	8,515
Louisiana	28,185	28,025	34,815	3,736	7,184	7,953
Maine	517	526	520	92	120	153
Maryland	38,933	41,678	49,285	5,696	9,577	11,052
Massachusetts	57,803	61,665	66,010	10,697	14,514	15,644
Michigan	184,746	213,972	230,118	31,736	47,397	48,977
Minnesota	60,111	74,099	79,475	7,148	16,337	15,023
Mississippi	NA	14,959	19,077	NA	NA	4,564
Missouri	69,542	75,376	83,137	10,435	17,763	18,966
Montana	9,927	11,398	11,491	1,676	2,429	2,404
Nebraska	25,351	28,108	28,428	4,324	6,482	6,642
Nevada	15,810	13,485	11,795	2,826	3,809	4,149
New Hampshire	3,692	3,854	4,035	697	845	1,010
New Jersey	104,056	120,561	130,169	17,514	26,429	29,313
New Mexico	19,550	18,264	17,394	2,589	4,740	4,337
New York	NA	225,134	228,231	26,989	NA	NA
North Carolina	33,066	29,949	38,036	5,018	7,535	9,710
North Dakota	5,889	7,051	7,118	953	1,464	1,561
Ohio	163,510	194,899	216,601	24,861	44,211	43,910
Oklahoma	42,112	41,836	47,210	5,854	10,832	11,652
Oregon	NA	18,722	17,497	NA	NA	4,581
Pennsylvania	NA	145,947	163,724	NA	32,526	34,714
Rhode Island	NA	10,236	11,026	NA	2,402	2,720
South Carolina	17,036	14,458	19,282	2,421	4,006	5,177
South Dakota	6,726	7,699	7,796	1,127	1,738	1,666
Tennessee	NA	NA	45,171	5,170	9,938	9,546
Texas	106,238	112,571	129,455	13,832	25,051	30,500
Utah	27,924	29,062	27,084	4,853	6,482	8,193
Vermont	1,430	1,501	1,507	266	340	397
Virginia	37,404	40,652	46,038	5,172	9,618	11,067
Washington	NA	32,981	32,232	NA	NA	NA
West Virginia	17,282	19,338	22,932	2,785	R4,553	R4,906
Wisconsin	64,034	73,978	81,061	9,198	17,130	15,618
Wyoming	NA	6,505	7,031	1,182	1,566	1,560
Total	2,503,249	2,714,235	2,943,603	402,378	R630,871	R675,877

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	9,689	48,328	7,914	3,963	1,435	1,250
Alaska	2,240	15,284	2,162	1,684	1,569	743
Arizona	7,103	31,162	4,780	1,980	1,057	1,127
Arkansas	5,336	42,472	6,375	4,018	1,346	949
California	82,302	486,233	69,510	40,537	24,905	21,772
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	6,263	39,929	5,901	3,625	1,492	1,001
Delaware	1,408	8,920	1,206	667	250	183
District of Columbia	2,409	15,698	2,312	1,414	553	393
Florida	2,470	14,538	2,038	1,192	755	699
Georgia	20,167	114,282	19,723	16,465	6,777	3,190
Hawaii	55	518	45	42	39	40
Idaho	2,975	15,245	2,372	1,429	639	315
Illinois	78,417	497,370	69,685	56,316	29,486	11,697
Indiana	[R]26,868	170,494	26,161	17,458	8,129	3,491
Iowa	13,560	81,357	12,039	8,592	4,027	1,645
Kansas	13,494	75,968	11,319	8,812	2,419	1,629
Kentucky	10,618	65,852	11,153	8,075	3,072	1,448
Louisiana	9,311	52,364	8,007	4,321	2,085	1,697
Maine	153	1,009	142	107	66	30
Maryland	12,609	77,109	10,927	8,296	3,543	2,067
Massachusetts	16,948	110,969	15,274	10,140	4,780	2,555
Michigan	56,636	379,431	49,980	37,898	17,835	8,767
Minnesota	21,603	132,392	17,705	15,376	6,811	2,864
Mississippi	NA	NA	4,327	2,545	896	NA
Missouri	22,378	128,012	19,007	12,077	3,667	2,625
Montana	3,418	20,995	3,197	2,030	1,230	508
Nebraska	7,902	47,115	5,790	4,401	1,382	936
Nevada	5,025	25,154	3,867	1,917	1,019	802
New Hampshire	1,140	6,949	933	616	327	175
New Jersey	30,800	212,726	30,622	19,893	8,843	5,309
New Mexico	7,884	36,380	8,162	4,067	1,209	830
New York	NA	400,876	50,610	35,378	16,616	9,976
North Carolina	10,803	52,993	9,219	4,884	1,441	935
North Dakota	1,910	11,900	1,471	1,178	474	229
Ohio	50,527	354,654	51,089	37,009	19,335	7,228
Oklahoma	13,774	71,745	11,053	6,181	1,966	1,548
Oregon	6,117	[R]33,308	4,834	2,809	1,498	[R]826
Pennsylvania	31,526	[R]262,841	37,823	26,338	12,987	6,315
Rhode Island	2,781	18,162	2,509	1,464	659	473
South Carolina	5,432	25,475	4,634	2,399	631	466
South Dakota	2,196	13,225	1,734	1,329	569	261
Tennessee	NA	NA	11,064	6,385	1,905	1,187
Texas	36,854	211,229	33,619	19,418	8,261	6,416
Utah	8,396	58,099	10,374	6,017	4,299	1,957
Vermont	427	2,631	345	214	118	59
Virginia	11,546	73,716	11,657	7,430	3,007	1,640
Washington	NA	NA	NA	NA	NA	NA
West Virginia	[R]5,039	36,349	6,079	4,103	1,755	784
Wisconsin	22,087	136,335	19,157	16,222	8,154	2,974
Wyoming	NA	12,163	1,489	1,175	646	330
Total	[R]794,124	[R]5,011,128	732,116	499,331	236,078	[R]131,767

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	1,238	1,392	1,604	2,638	3,180	5,326
Alaska	402	463	508	789	1,177	1,767
Arizona	910	1,019	1,154	1,571	2,259	4,235
Arkansas	918	1,028	1,240	2,324	3,293	4,942
California	20,951	26,840	23,572	28,707	39,271	48,377
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	903	949	1,380	2,332	4,378	5,176
Delaware	178	194	318	557	942	1,265
District of Columbia	372	419	562	944	1,316	2,049
Florida	742	785	856	944	1,013	1,279
Georgia	2,944	3,195	3,357	3,834	8,221	9,001
Hawaii	41	43	41	42	41	46
Idaho	294	346	433	939	1,464	1,909
Illinois	10,111	10,378	11,617	26,081	41,192	61,416
Indiana	2,989	2,852	4,958	9,482	15,219	20,684
Iowa	1,472	1,593	2,102	3,938	6,971	9,528
Kansas	1,616	1,862	1,652	3,581	6,402	8,769
Kentucky	1,077	1,419	1,572	2,954	4,883	7,293
Louisiana	1,671	1,685	2,050	2,824	3,680	5,619
Maine	26	21	34	56	85	142
Maryland	1,800	1,906	2,677	4,215	6,913	8,998
Massachusetts	2,437	2,831	4,370	6,917	12,122	15,127
Michigan	7,264	4,748	12,010	26,958	38,256	51,299
Minnesota	2,556	2,706	3,499	6,775	11,435	16,959
Mississippi	NA	NA	920	1,463	1,904	3,038
Missouri	2,403	2,717	3,665	6,474	11,030	15,422
Montana	447	411	631	1,143	1,996	2,468
Nebraska	937	1,015	1,367	3,177	4,355	6,232
Nevada	777	887	981	1,419	2,018	3,172
New Hampshire	155	160	263	465	744	913
New Jersey	4,680	5,102	6,457	11,258	18,139	31,984
New Mexico	843	815	238	1,952	1,503	3,810
New York	10,405	10,440	15,312	27,004	41,729	52,648
North Carolina	900	1,074	1,599	2,991	4,087	5,811
North Dakota	206	228	333	730	1,178	1,576
Ohio	6,202	7,533	9,785	21,575	33,023	44,153
Oklahoma	1,519	1,679	2,105	3,857	6,160	9,070
Oregon	[R]756	[R]878	[R]1,065	1,920	3,206	4,350
Pennsylvania	[R]5,249	5,153	7,583	15,446	25,130	33,537
Rhode Island	443	480	727	1,171	1,994	2,462
South Carolina	444	512	701	1,230	1,776	2,592
South Dakota	233	248	368	784	1,250	1,625
Tennessee	1,080	1,119	NA	3,019	4,797	NA
Texas	6,101	6,829	7,595	10,420	14,025	22,686
Utah	1,466	1,501	1,601	1,821	4,875	5,945
Vermont	52	57	97	189	283	383
Virginia	1,473	1,576	2,054	4,227	6,662	9,123
Washington	NA	NA	NA	5,591	4,586	8,132
West Virginia	594	488	961	2,246	3,421	4,318
Wisconsin	2,550	2,878	2,965	7,456	11,112	17,378
Wyoming	252	294	395	1,076	1,058	1,544
Total	[R]119,922	[R]131,022	[R]160,605	286,052	434,687	605,838

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997		1996			
	February	January	Total	December	November	October
Alabama	9,098	9,290	56,522	6,664	3,461	1,647
Alaska	1,618	2,402	16,179	2,181	1,708	1,238
Arizona	5,092	5,978	27,709	4,051	2,322	1,082
Arkansas	7,754	8,285	46,289	6,286	3,768	1,425
California	66,688	75,103	473,310	62,905	43,702	30,462
Colorado	NA	NA	110,924	15,814	9,571	4,886
Connecticut	6,538	6,255	43,764	5,842	3,522	1,840
Delaware	1,612	1,549	9,791	1,236	648	291
District of Columbia	2,655	2,708	17,290	2,406	1,252	578
Florida	2,068	2,167	16,293	1,583	972	752
Georgia	16,024	21,550	127,062	18,574	14,651	5,771
Hawaii	49	51	540	44	41	39
Idaho	2,542	2,564	14,941	2,224	1,570	646
Illinois	69,338	100,053	538,749	80,922	63,715	28,081
Indiana	26,294	32,779	179,939	26,087	18,577	7,846
Iowa	11,881	17,568	88,078	14,138	9,782	3,620
Kansas	12,105	15,803	85,376	14,388	9,447	3,163
Kentucky	8,964	13,942	70,232	10,177	9,022	3,018
Louisiana	8,991	9,736	56,626	6,173	3,511	2,102
Maine	133	166	967	120	105	67
Maryland	12,080	13,687	85,533	11,426	7,828	3,738
Massachusetts	17,654	16,762	114,365	13,947	9,943	5,012
Michigan	57,545	66,871	399,522	52,724	38,862	18,528
Minnesota	19,966	25,740	142,319	22,152	14,959	6,705
Mississippi	4,968	5,050	30,157	3,676	1,880	929
Missouri	23,426	25,499	137,225	20,539	11,687	4,321
Montana	3,038	3,897	22,175	3,286	2,458	1,267
Nebraska	7,829	9,692	48,989	7,283	4,043	2,173
Nevada	3,825	4,470	22,607	3,386	2,069	894
New Hampshire	1,136	1,061	7,012	855	667	312
New Jersey	34,709	35,729	222,619	29,983	18,933	9,917
New Mexico	5,630	7,320	33,689	5,663	3,689	1,330
New York	63,646	67,111	403,264	NA	NA	NA
North Carolina	10,002	10,050	58,812	8,607	4,461	1,701
North Dakota	1,984	2,313	12,591	1,894	1,256	554
Ohio	52,497	65,225	374,824	52,480	38,565	18,651
Oklahoma	12,687	13,920	76,629	11,298	5,722	2,267
Oregon	5,308	5,857	33,236	5,200	3,164	1,357
Pennsylvania	41,287	45,992	278,606	36,688	27,037	13,202
Rhode Island	2,891	2,890	18,839	2,350	1,416	738
South Carolina	4,994	5,097	29,406	4,336	2,168	800
South Dakota	2,089	2,735	14,085	2,243	1,414	578
Tennessee	12,086	12,795	70,423	10,177	5,949	1,987
Texas	33,154	42,706	229,318	33,952	17,793	9,479
Utah	8,366	9,876	54,344	8,203	5,749	4,215
Vermont	416	419	2,523	302	208	100
Virginia	11,741	13,126	76,214	10,946	7,388	2,879
Washington	9,377	10,885	62,689	9,804	6,207	2,930
West Virginia	5,630	5,969	37,390	5,166	3,391	1,609
Wisconsin	19,323	26,165	147,893	21,285	16,724	7,783
Wyoming	1,660	2,243	13,534	1,744	1,334	1,087
Total	766,614	907,096	5,241,414	737,722	502,981	243,121

R = Revised Data.
NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998

(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				April	March	February
Alabama	14,440	13,094	16,026	2,379	3,522	4,010
Alaska	9,386	10,901	11,403	1,911	2,251	2,340
Arizona	14,223	13,099	12,209	3,013	3,548	3,534
Arkansas	14,427	15,174	17,519	1,728	3,843	4,075
California	101,835	96,626	85,834	23,269	19,321	28,787
Colorado	NA	NA	36,509	NA	NA	NA
Connecticut	20,590	19,990	19,865	4,294	4,999	5,540
Delaware	3,219	3,557	3,856	556	829	899
District of Columbia	8,787	7,676	7,565	1,830	2,032	2,382
Florida	15,798	14,311	17,088	3,701	3,961	3,984
Georgia	28,863	25,522	31,318	4,882	7,391	8,120
Hawaii	721	730	765	174	172	179
Idaho	6,046	5,986	5,871	1,077	1,423	1,570
Illinois	90,871	107,426	115,105	15,326	22,556	22,455
Indiana	NA	46,596	48,776	NA	11,063	10,460
Iowa	25,089	26,927	29,447	3,605	7,584	5,962
Kansas	24,950	25,335	28,053	3,381	8,014	6,177
Kentucky	17,847	19,695	22,484	2,490	4,636	5,053
Louisiana	16,613	11,450	13,249	2,048	5,056	4,998
Maine	1,351	1,389	1,364	255	332	342
Maryland	22,893	23,443	23,404	3,668	6,091	6,474
Massachusetts	47,000	48,376	45,762	8,771	11,570	R12,943
Michigan	88,204	105,897	110,492	15,784	22,837	23,664
Minnesota	43,802	49,344	51,339	5,685	11,726	11,133
Mississippi	NA	9,926	11,416	NA	NA	3,310
Missouri	35,135	39,139	40,680	5,545	8,978	9,467
Montana	6,193	7,499	7,564	1,029	1,527	1,459
Nebraska	15,953	18,059	17,584	2,786	4,027	4,237
Nevada	10,502	9,678	8,855	2,207	2,642	2,575
New Hampshire	3,798	3,844	3,925	710	869	1,051
New Jersey	70,486	71,296	78,965	11,748	19,826	18,713
New Mexico	13,244	12,885	12,236	2,281	3,211	3,243
New York	NA	148,562	NA	20,716	NA	NA
North Carolina	20,491	18,687	21,945	3,326	4,879	5,791
North Dakota	5,512	6,364	6,469	953	1,372	1,434
Ohio	85,690	98,352	107,208	13,211	21,443	23,991
Oklahoma	25,193	23,519	25,738	4,018	6,347	6,859
Oregon	NA	13,077	12,397	NA	NA	3,308
Pennsylvania	NA	72,984	83,099	NA	17,790	19,674
Rhode Island	NA	6,323	6,739	NA	1,492	1,620
South Carolina	9,908	7,844	9,992	1,732	2,440	2,781
South Dakota	5,054	5,828	6,051	806	1,335	1,292
Tennessee	NA	NA	31,830	4,714	7,027	6,063
Texas	80,049	80,279	77,651	14,839	20,104	R20,826
Utah	15,315	15,563	14,761	2,749	3,787	4,235
Vermont	1,585	1,646	1,563	281	381	436
Virginia	30,288	29,665	29,241	5,338	7,878	8,398
Washington	NA	23,476	22,746	NA	NA	NA
West Virginia	15,041	12,594	14,191	2,235	3,146	6,096
Wisconsin	40,184	46,207	50,205	6,632	11,019	9,845
Wyoming	NA	6,143	4,335	783	1,128	1,288
Total	1,458,267	1,545,171	1,594,068	253,347	368,098	R391,709

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	4,529	34,239	3,740	2,540	2,107	2,375
Alaska	2,883	R26,795	R3,134	R2,647	R2,564	R1,588
Arizona	4,129	30,178	3,386	2,273	1,754	1,839
Arkansas	4,781	29,518	3,996	2,726	1,352	1,133
California	30,457	254,440	26,174	21,235	19,673	18,468
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	5,757	R41,257	5,776	3,208	R2,502	1,560
Delaware	935	6,547	864	520	282	233
District of Columbia	2,542	17,034	2,293	1,354	899	852
Florida	4,152	37,644	3,833	3,203	2,687	2,561
Georgia	8,471	57,474	7,991	6,146	3,654	2,811
Hawaii	196	2,174	185	251	171	166
Idaho	1,977	11,435	1,657	982	585	411
Illinois	30,533	205,941	27,467	23,244	12,431	6,546
Indiana	R12,876	98,622	13,318	9,608	5,146	2,667
Iowa	7,938	50,218	7,166	5,681	3,031	1,358
Kansas	7,378	52,331	6,777	4,780	2,508	2,087
Kentucky	5,668	39,046	6,217	4,223	2,429	1,268
Louisiana	4,511	24,451	2,987	1,988	1,330	1,250
Maine	422	2,713	375	289	176	91
Maryland	6,659	53,255	6,365	8,614	2,917	2,271
Massachusetts	13,716	105,883	11,544	8,664	7,063	5,488
Michigan	25,919	197,276	26,512	19,536	10,084	6,211
Minnesota	15,257	93,655	12,420	10,831	5,320	2,563
Mississippi	NA	NA	2,928	2,026	1,157	NA
Missouri	11,144	70,044	9,543	6,200	2,736	2,196
Montana	2,178	13,932	2,005	1,299	793	423
Nebraska	4,903	42,107	4,247	3,487	2,351	1,868
Nevada	3,078	21,822	2,567	1,797	1,270	1,192
New Hampshire	1,167	7,408	1,010	703	411	249
New Jersey	20,200	147,228	20,186	13,739	7,215	6,062
New Mexico	4,509	26,151	3,956	2,423	1,160	1,020
New York	NA	346,939	36,071	27,233	21,384	18,287
North Carolina	6,495	38,942	5,608	3,490	2,057	1,751
North Dakota	1,753	11,392	1,374	1,163	588	344
Ohio	27,046	R184,883	25,219	17,840	9,823	5,006
Oklahoma	7,969	43,776	5,673	3,390	2,126	1,659
Oregon	3,889	25,380	3,341	2,016	1,363	1,023
Pennsylvania	21,571	R147,290	20,160	14,246	9,659	5,298
Rhode Island	1,786	12,303	1,413	1,212	637	460
South Carolina	2,955	19,874	2,671	1,771	1,176	1,904
South Dakota	1,621	10,426	1,312	1,022	549	334
Tennessee	NA	NA	8,120	5,216	2,846	2,120
Texas	24,280	206,455	23,104	18,448	14,187	15,035
Utah	4,544	31,130	5,152	3,187	2,020	1,124
Vermont	487	3,051	403	282	184	108
Virginia	8,673	61,430	8,549	5,455	3,489	2,392
Washington	NA	NA	NA	NA	NA	NA
West Virginia	3,564	26,927	3,447	2,904	1,576	1,195
Wisconsin	12,688	92,418	12,954	10,586	5,664	2,901
Wyoming	NA	12,291	1,092	1,065	633	372
Total	R445,113	R3,290,980	R413,133	R317,125	R194,860	R147,605

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	3,087	3,497	1,779	2,020	2,194	2,613
Alaska	R1,336	R1,398	R1,422	R1,806	R2,215	R2,848
Arizona	1,770	1,939	1,976	2,141	2,563	3,153
Arkansas	1,132	1,133	1,219	1,653	2,172	3,149
California	18,728	17,971	16,572	18,994	21,091	23,612
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	1,754	1,895	1,986	2,586	4,055	4,797
Delaware	183	206	281	420	628	858
District of Columbia	853	783	951	1,373	842	2,183
Florida	2,651	2,578	2,917	2,902	3,017	3,307
Georgia	2,626	2,709	2,800	3,216	4,152	4,864
Hawaii	160	175	170	166	174	180
Idaho	356	373	399	686	1,041	1,345
Illinois	5,935	6,084	6,145	10,664	16,797	23,444
Indiana	2,551	2,428	6,344	9,965	7,610	10,465
Iowa	1,110	1,306	1,262	2,376	3,976	5,758
Kansas	2,685	3,283	2,078	2,798	4,004	6,012
Kentucky	967	1,176	1,181	1,890	2,913	4,093
Louisiana	1,195	1,350	1,408	1,492	1,837	2,463
Maine	78	72	92	152	231	378
Maryland	2,226	2,378	2,305	2,735	4,420	5,563
Massachusetts	5,776	5,555	7,151	6,266	9,068	11,630
Michigan	5,889	2,278	7,664	13,205	19,207	25,654
Minnesota	2,522	2,496	3,004	5,155	8,361	12,000
Mississippi	NA	NA	1,176	1,237	1,533	2,106
Missouri	2,054	2,151	2,457	3,569	5,786	7,970
Montana	383	363	451	714	1,342	1,652
Nebraska	2,896	5,042	1,728	2,430	3,190	4,117
Nevada	1,145	1,097	1,409	1,666	1,896	2,442
New Hampshire	217	216	286	472	739	954
New Jersey	5,793	6,094	7,027	9,816	13,645	21,543
New Mexico	997	984	960	1,766	1,862	2,935
New York	22,102	23,940	24,103	25,257	31,231	36,768
North Carolina	1,629	1,548	1,770	2,401	2,973	3,806
North Dakota	291	305	343	619	1,095	1,408
Ohio	4,408	4,153	R8,743	11,339	15,190	23,205
Oklahoma	1,626	1,649	1,517	2,617	3,571	5,041
Oregon	912	1,007	1,067	1,574	2,304	3,076
Pennsylvania	R4,356	4,680	5,554	10,354	13,007	17,888
Rhode Island	399	431	537	892	1,144	1,740
South Carolina	1,019	997	1,214	1,278	1,222	1,816
South Dakota	250	246	283	604	940	1,235
Tennessee	2,064	2,090	NA	3,242	4,276	NA
Texas	15,234	15,315	11,993	12,860	13,790	19,967
Utah	943	927	946	1,268	2,675	3,363
Vermont	80	80	108	160	296	429
Virginia	2,449	2,370	2,681	4,381	5,762	7,212
Washington	NA	NA	NA	4,098	4,100	5,627
West Virginia	1,292	1,044	1,181	1,693	2,222	2,816
Wisconsin	2,961	2,769	2,868	5,507	7,225	10,989
Wyoming	345	943	633	1,065	1,445	1,593
Total	R148,248	R150,826	R161,424	R212,588	R273,153	R366,359

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997		1996			
	February	January	Total	December	November	October
Alabama	4,063	4,224	29,002	3,123	1,991	1,402
Alaska	R2,518	R3,320	27,315	3,236	2,743	2,337
Arizona	3,525	3,858	29,102	3,259	2,461	1,748
Arkansas	4,730	5,123	31,009	3,876	2,462	1,356
California	26,107	25,816	236,332	24,836	21,313	18,727
Colorado	NA	NA	68,931	9,028	5,807	3,306
Connecticut	5,346	5,792	39,818	4,902	3,112	2,400
Delaware	1,046	1,025	6,695	821	502	277
District of Columbia	2,316	2,335	16,353	2,325	1,195	804
Florida	3,862	4,126	41,898	3,830	3,179	2,957
Georgia	7,924	8,582	61,377	7,462	5,450	3,339
Hawaii	188	188	2,132	176	160	170
Idaho	1,784	1,816	11,540	1,621	1,107	597
Illinois	30,059	37,125	218,086	32,425	25,216	12,090
Indiana	12,807	15,715	87,568	12,378	9,122	4,102
Iowa	7,056	10,137	54,576	8,510	5,896	2,101
Kansas	8,130	7,190	57,231	9,187	4,867	2,057
Kentucky	5,483	7,206	40,980	5,892	4,439	2,241
Louisiana	3,574	3,575	25,769	2,435	1,680	1,395
Maine	348	433	2,566	310	280	172
Maryland	6,380	7,080	45,891	5,433	4,693	2,427
Massachusetts	13,854	13,824	96,192	11,752	9,718	5,432
Michigan	28,433	32,603	201,431	26,123	19,486	9,472
Minnesota	13,403	15,580	98,580	15,009	10,756	5,479
Mississippi	3,062	3,226	22,230	2,333	1,631	1,088
Missouri	12,828	12,556	72,833	10,204	6,136	2,959
Montana	1,947	2,558	14,836	2,123	1,659	848
Nebraska	4,845	5,907	40,833	5,032	3,678	2,778
Nevada	2,629	2,711	20,469	2,417	1,817	1,269
New Hampshire	1,079	1,073	7,099	896	698	360
New Jersey	14,211	21,897	150,432	18,834	12,586	7,731
New Mexico	3,938	4,151	26,544	3,553	2,450	1,365
New York	41,464	39,099	253,129	NA	NA	NA
North Carolina	5,850	6,059	40,467	5,160	3,240	1,917
North Dakota	1,879	1,982	12,165	1,726	1,286	661
Ohio	28,174	31,783	190,195	26,298	18,274	8,548
Oklahoma	7,183	7,724	46,284	6,014	3,273	1,900
Oregon	3,686	4,011	25,622	3,595	2,314	1,306
Pennsylvania	19,583	22,506	154,677	22,333	15,107	8,161
Rhode Island	1,744	1,694	12,301	1,290	972	648
South Carolina	2,409	2,397	20,329	2,447	1,644	1,157
South Dakota	1,607	2,045	11,602	1,813	1,237	571
Tennessee	9,488	9,084	58,513	7,599	5,116	2,830
Texas	21,284	25,238	178,573	18,053	12,865	10,151
Utah	4,473	5,051	29,666	4,220	3,185	2,073
Vermont	444	477	2,825	348	276	162
Virginia	8,021	8,670	59,294	7,489	5,776	3,363
Washington	6,275	7,474	48,252	6,623	4,489	2,701
West Virginia	3,652	3,903	28,030	3,400	2,494	1,620
Wisconsin	12,071	15,922	93,868	13,368	11,029	4,694
Wyoming	1,423	1,681	9,735	1,748	1,301	640
Total	R427,944	R477,715	3,161,176	409,165	294,522	171,277

R = Revised Data.
NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Deliveries for total year 1996 may not equal the sum of the twelve months. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998

(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				April	March	February
Alabama	70,144	68,942	68,492	17,013	18,208	16,441
Alaska	25,939	26,974	23,808	6,455	6,878	6,152
Arizona	9,452	8,800	9,331	2,281	2,413	2,226
Arkansas	51,581	50,308	48,760	12,765	13,363	12,114
California	234,217	229,156	226,558	55,492	47,185	67,501
Colorado	NA	NA	30,615	NA	NA	4,728
Connecticut	12,515	12,949	10,623	2,782	3,183	3,149
Delaware	5,872	5,038	4,612	1,348	1,477	1,443
District of Columbia	0	0	0	0	0	0
Florida	48,552	45,070	46,184	11,608	12,960	[R]11,053
Georgia	53,444	64,322	59,708	12,866	13,434	13,335
Hawaii	0	0	0	0	0	0
Idaho [a]	13,003	12,348	12,460	3,047	3,130	3,482
Illinois	117,890	120,834	126,648	26,752	29,211	28,719
Indiana	NA	105,192	104,231	NA	27,772	25,847
Iowa	43,288	39,403	40,628	10,660	11,792	9,516
Kansas	34,207	41,121	38,605	8,011	8,686	7,811
Kentucky	33,817	35,624	34,909	7,543	8,884	7,550
Louisiana	317,356	322,759	343,112	77,970	81,959	[R]74,500
Maine	647	771	672	122	159	164
Maryland	40,059	18,996	16,364	4,407	11,276	10,677
Massachusetts	35,334	40,906	33,843	8,209	8,759	8,443
Michigan	124,285	126,599	134,134	26,873	32,052	31,380
Minnesota	36,802	38,664	34,808	8,548	9,039	10,044
Mississippi	NA	27,279	28,820	NA	NA	6,814
Missouri	25,669	28,809	28,873	5,473	6,788	6,360
Montana	6,335	6,420	6,272	1,521	1,481	1,449
Nebraska	11,969	13,222	13,342	2,543	3,043	2,902
Nevada	8,199	8,996	10,521	2,453	2,174	1,979
New Hampshire	1,903	2,024	1,545	457	468	498
New Jersey	70,241	69,904	68,350	16,455	17,152	17,655
New Mexico	7,678	8,607	8,200	2,049	1,822	1,823
New York	NA	117,799	112,154	22,542	26,423	NA
North Carolina	41,369	40,020	32,516	9,366	10,846	10,404
North Dakota	3,873	4,726	2,771	898	1,017	948
Ohio	129,310	126,416	132,654	29,362	32,257	31,779
Oklahoma	64,593	72,246	68,088	14,388	16,578	17,131
Oregon	NA	28,582	25,411	NA	NA	8,744
Pennsylvania	84,433	90,183	90,027	19,808	21,699	20,811
Rhode Island	8,378	8,878	5,206	2,078	2,117	2,011
South Carolina	36,053	34,618	28,794	8,159	9,121	9,129
South Dakota	1,818	2,997	2,962	279	474	500
Tennessee	NA	NA	42,177	12,020	14,188	12,628
Texas	631,223	694,511	728,908	153,724	[R]159,503	[R]148,544
Utah	17,568	15,041	14,675	4,480	4,273	4,080
Vermont	785	811	631	164	194	205
Virginia	28,433	26,499	30,457	7,746	6,497	7,444
Washington	NA	35,731	37,741	NA	NA	NA
West Virginia	14,858	17,530	16,754	4,099	4,553	1,696
Wisconsin	56,112	62,166	60,138	11,658	14,819	13,298
Wyoming	NA	16,511	16,998	NA	NA	NA
Total	2,967,879	3,053,649	3,064,094	693,801	[R]747,918	[R]728,501

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	18,483	206,129	18,755	17,910	17,161	16,150
Alaska	6,454	73,863	6,876	5,571	6,313	4,233
Arizona	2,533	27,889	2,688	2,360	2,335	2,582
Arkansas	13,339	147,046	13,202	12,751	12,471	11,035
California	64,039	731,180	63,859	61,447	60,283	65,816
Colorado	5,321	NA	NA	NA	NA	NA
Connecticut	3,402	35,031	3,422	3,408	2,588	2,362
Delaware	1,604	14,841	1,580	1,327	1,202	1,107
District of Columbia	0	0	0	0	0	0
Florida	R12,931	132,636	11,487	10,945	10,925	10,734
Georgia	13,808	170,988	12,800	12,468	12,817	12,855
Hawaii	0	0	0	0	0	0
Idaho [a]	3,344	35,089	3,159	3,109	3,226	2,756
Illinois	33,208	316,352	30,515	27,702	24,750	22,004
Indiana	R28,857	282,466	28,684	26,650	23,332	21,152
Iowa	11,321	111,430	10,686	10,199	9,886	8,468
Kansas	R9,699	115,454	10,909	8,587	8,210	7,655
Kentucky	9,839	97,555	9,442	8,835	8,625	7,052
Louisiana	82,928	983,217	81,573	80,707	84,368	82,780
Maine	202	2,525	216	296	243	208
Maryland	13,699	61,353	13,713	263	4,308	4,427
Massachusetts	9,923	110,880	9,185	8,316	8,095	7,625
Michigan	33,980	326,414	31,551	27,735	24,470	23,655
Minnesota	9,171	107,280	10,111	10,179	9,139	7,244
Mississippi	NA	NA	7,043	7,238	6,572	NA
Missouri	7,047	69,623	6,701	6,057	5,106	4,322
Montana	1,884	18,122	2,064	1,850	1,612	1,290
Nebraska	3,481	32,514	3,723	1,923	2,697	2,050
Nevada	R1,593	R27,795	R2,213	R2,214	R2,421	R2,426
New Hampshire	481	6,085	468	442	499	—
New Jersey	18,980	202,654	17,569	15,519	16,683	16,219
New Mexico	1,984	24,853	2,146	2,019	1,881	1,982
New York	NA	325,392	27,393	27,674	21,794	26,738
North Carolina	10,752	116,320	10,426	9,608	9,568	9,017
North Dakota	1,010	11,151	929	869	812	754
Ohio	35,912	R343,764	32,492	30,107	26,986	24,750
Oklahoma	16,497	205,823	16,600	15,704	15,473	16,687
Oregon	9,760	R90,658	R9,760	R8,798	8,284	8,041
Pennsylvania	22,115	235,913	20,983	21,509	17,230	16,783
Rhode Island	2,173	24,470	2,179	2,148	1,509	1,440
South Carolina	9,645	R103,578	9,344	8,702	8,239	8,883
South Dakota	565	6,961	606	618	425	470
Tennessee	NA	NA	12,466	8,602	11,242	13,313
Texas	R169,452	NA	174,230	162,492	165,162	NA
Utah	4,735	44,290	4,504	4,129	4,228	2,497
Vermont	223	2,337	235	226	224	176
Virginia	6,747	R83,965	7,773	6,522	5,914	6,951
Washington	NA	NA	NA	NA	NA	NA
West Virginia	4,510	51,114	4,610	4,353	4,150	4,032
Wisconsin	16,337	152,545	14,848	14,202	11,931	10,069
Wyoming	NA	46,627	4,102	4,328	3,966	2,830
Total	R797,659	R8,761,834	R789,667	R723,917	R705,629	R687,438

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	16,827	16,848	16,253	17,284	18,182	16,885
Alaska	6,395	5,968	5,915	5,619	6,443	6,993
Arizona	2,375	2,246	2,170	2,332	2,089	2,351
Arkansas	11,994	11,785	11,598	11,903	12,008	12,361
California	67,815	65,810	58,874	58,119	57,480	57,065
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	2,550	2,440	2,441	2,870	3,308	3,521
Delaware	1,017	1,106	1,156	1,308	1,354	1,249
District of Columbia	0	0	0	0	0	0
Florida	10,355	11,071	10,526	11,522	11,739	11,318
Georgia	13,575	12,874	12,448	16,828	16,740	16,153
Hawaii	0	0	0	0	0	0
Idaho [a]	2,371	2,723	2,724	2,673	3,180	3,200
Illinois	20,706	22,431	22,272	25,139	26,550	29,761
Indiana	20,475	19,853	17,289	19,839	23,608	26,703
Iowa	8,680	7,768	7,823	8,516	9,081	9,800
Kansas	8,324	12,351	8,854	9,443	9,903	9,911
Kentucky	7,079	6,526	6,669	7,704	7,769	8,408
Louisiana	83,946	80,979	82,324	83,780	82,622	78,729
Maine	191	178	197	226	247	182
Maryland	5,019	4,767	5,126	4,734	4,495	5,528
Massachusetts	8,946	8,930	10,487	8,389	10,392	10,520
Michigan	23,705	16,029	25,327	27,343	27,854	32,629
Minnesota	8,412	8,176	7,733	7,622	8,544	10,448
Mississippi	NA	NA	6,054	5,804	6,535	6,721
Missouri	4,338	4,492	4,810	4,987	7,149	5,099
Montana	1,253	1,093	1,176	1,365	1,178	1,695
Nebraska	2,627	1,207	2,484	2,580	3,404	3,426
Nevada	[R]2,430	[R]2,294	[R]2,272	[R]2,528	[R]2,117	[R]2,373
New Hampshire	451	422	434	905	632	570
New Jersey	17,715	16,450	15,822	16,773	16,587	18,406
New Mexico	1,957	2,097	2,041	2,123	1,935	1,944
New York	24,589	27,876	25,785	25,745	27,455	30,706
North Carolina	9,696	9,102	9,195	9,687	10,561	10,341
North Dakota	817	625	707	911	867	1,574
Ohio	24,078	22,725	[R]29,566	26,644	27,049	30,688
Oklahoma	17,620	16,618	17,536	17,339	17,335	17,207
Oregon	8,313	7,289	5,557	6,033	[R]6,408	[R]6,846
Pennsylvania	17,206	16,881	16,359	18,780	21,556	22,001
Rhode Island	1,491	2,159	2,265	2,401	2,514	2,241
South Carolina	[R]8,277	[R]7,943	8,451	9,122	9,260	9,152
South Dakota	499	322	492	531	624	705
Tennessee	13,153	10,831	NA	11,767	12,548	NA
Texas	172,857	166,725	165,999	166,759	164,032	182,742
Utah	3,369	3,482	3,408	3,633	3,757	3,777
Vermont	157	144	146	218	200	234
Virginia	8,927	8,064	5,864	7,452	6,449	4,162
Washington	NA	NA	NA	8,513	8,189	9,259
West Virginia	4,106	3,991	3,905	4,439	6,731	2,577
Wisconsin	9,521	9,041	9,458	11,310	13,597	15,650
Wyoming	3,672	3,234	3,858	4,125	3,864	3,795
Total	[R]713,647	[R]687,103	[R]687,738	[R]713,048	[R]732,950	[R]767,957

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997		1996			
	February	January	Total	December	November	October
Alabama	16,341	17,534	201,414	17,016	16,951	18,097
Alaska	6,448	7,090	75,616	7,034	6,450	6,421
Arizona	2,132	2,228	26,979	2,536	2,436	2,363
Arkansas	12,195	13,744	141,300	12,552	12,171	12,008
California	55,756	58,855	693,539	61,618	59,107	57,199
Colorado	NA	NA	83,640	7,861	7,271	5,109
Connecticut	3,031	3,088	32,451	3,013	3,386	3,108
Delaware	1,192	1,243	14,164	1,148	1,180	1,338
District of Columbia	0	0	0	0	0	0
Florida	10,645	11,369	136,722	11,160	11,655	10,931
Georgia	16,385	15,044	181,768	15,926	15,856	15,569
Hawaii	0	0	0	0	0	0
Idaho [a]	2,802	3,166	34,577	2,891	2,747	3,023
Illinois	31,673	32,850	322,275	35,802	30,672	24,666
Indiana	25,597	29,284	289,219	25,886	24,549	23,056
Iowa	9,785	10,738	113,995	10,955	11,178	9,460
Kansas	9,183	12,123	110,294	9,372	9,897	7,314
Kentucky	8,964	10,483	94,481	9,646	8,705	7,555
Louisiana	78,331	83,077	1,048,432	86,865	89,171	89,370
Maine	162	180	2,190	171	234	239
Maryland	4,661	4,312	50,022	4,956	3,981	4,196
Massachusetts	10,375	9,619	100,015	9,252	8,643	9,419
Michigan	32,134	33,982	347,043	32,754	29,990	25,126
Minnesota	10,202	9,471	102,471	9,903	10,656	9,236
Mississippi	6,686	7,337	80,887	6,503	6,507	7,363
Missouri	9,463	7,097	71,533	6,510	6,157	4,963
Montana	1,634	1,913	18,103	1,985	1,668	1,554
Nebraska	3,257	3,135	36,125	3,689	3,179	3,248
Nevada	[R]2,144	[R]2,362	32,606	2,859	2,705	2,548
New Hampshire	411	411	4,916	404	529	471
New Jersey	15,694	19,217	200,933	27,230	17,727	14,853
New Mexico	2,119	2,608	22,858	2,173	1,875	1,799
New York	31,100	28,538	322,661	31,374	26,765	25,488
North Carolina	9,950	9,168	104,124	9,413	9,964	10,368
North Dakota	1,253	1,033	7,911	924	955	685
Ohio	32,631	36,048	347,149	33,111	30,242	27,432
Oklahoma	18,790	18,914	201,024	19,194	15,941	16,689
Oregon	[R]6,722	[R]8,606	87,754	8,498	8,526	8,657
Pennsylvania	23,241	23,384	243,499	21,089	22,617	19,275
Rhode Island	1,993	2,131	25,829	2,553	2,992	3,189
South Carolina	8,054	8,152	95,493	8,646	8,699	8,836
South Dakota	792	877	7,182	715	694	523
Tennessee	12,789	11,698	126,545	12,264	12,388	10,679
Texas	160,683	187,054	2,138,155	181,384	171,353	181,999
Utah	3,698	3,809	42,213	3,693	3,663	3,592
Vermont	197	181	1,953	191	211	174
Virginia	8,056	[R]7,833	84,357	9,782	7,474	6,080
Washington	9,170	9,112	114,236	9,758	10,859	10,660
West Virginia	3,836	4,386	49,997	4,443	4,418	4,310
Wisconsin	14,948	17,970	149,517	15,456	14,652	11,984
Wyoming	3,792	5,060	50,253	4,647	4,741	4,678
Total	[R]747,761	[R]804,981	8,870,422	806,805	764,387	736,900

[a] Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components. Deliveries for total year 1995 in Idaho do not equal the sum of the twelve months.

[R] = Revised Data.

NA = Not Available.

— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1998

(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				April	March	February
Alabama	1,197	835	462	296	383	157
Alaska	9,808	12,175	10,609	2,266	2,382	2,307
Arizona	3,610	1,988	3,053	1,127	718	804
Arkansas	4,364	1,689	5,535	2,283	1,521	272
California	86,462	81,352	71,615	18,055	23,374	18,278
Colorado	1,834	1,244	1,060	586	416	451
Connecticut	1,425	3,662	379	157	23	109
Delaware	1,353	7,934	6,629	548	475	74
District of Columbia	0	0	0	0	0	0
Florida	68,600	84,795	67,664	15,860	18,020	15,637
Georgia	441	266	188	98	183	57
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	16,405	10,244	4,676	4,835	4,022	3,535
Indiana	822	754	1,191	205	426	104
Iowa	1,009	1,102	901	298	245	202
Kansas	2,519	2,371	3,723	594	935	446
Kentucky	613	438	500	107	282	138
Louisiana	59,310	63,363	57,645	18,082	16,198	9,860
Maine	0	0	0	0	0	0
Maryland	1,159	2,047	523	373	371	223
Massachusetts	6,705	16,271	5,980	1,579	1,565	1,320
Michigan	13,095	8,933	9,306	3,602	3,758	2,496
Minnesota	696	2,094	1,122	268	204	105
Mississippi	14,188	11,886	14,751	4,400	3,921	2,775
Missouri	587	388	575	210	161	80
Montana	55	125	107	15	39	0
Nebraska	293	360	544	176	59	21
Nevada	12,150	10,167	10,812	3,549	2,446	3,128
New Hampshire	26	1	1	0	0	26
New Jersey	4,162	5,728	4,591	1,380	1,835	419
New Mexico	10,259	9,364	7,125	3,448	3,092	1,802
New York	46,472	43,675	18,205	9,076	10,397	10,274
North Carolina	115	36	50	12	91	1
North Dakota	0	0	0	0	0	0
Ohio	695	375	381	178	307	96
Oklahoma	29,002	24,775	30,349	7,944	9,394	5,205
Oregon	6,173	425	0	2,266	1,335	1,102
Pennsylvania	1,147	1,248	951	260	406	257
Rhode Island	7,707	8,142	7,292	1,606	1,889	1,599
South Carolina	186	99	28	37	106	11
South Dakota	145	170	20	33	42	6
Tennessee	0	0	29	0	0	0
Texas	266,940	234,541	278,105	83,043	80,475	49,071
Utah	587	597	553	135	156	144
Vermont	120	10	3	6	3	47
Virginia	3,226	2,867	1,925	699	1,197	476
Washington	771	14	149	152	121	5
West Virginia	100	67	78	22	29	29
Wisconsin	2,274	6,864	1,289	395	1,108	353
Wyoming	218	28	25	8	3	200
Total	689,025	665,506	630,698	190,266	194,113	133,700

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	362	9,996	87	296	846	1,247
Alaska	2,852	33,511	3,023	2,676	2,689	2,296
Arizona	962	23,384	752	400	1,544	5,106
Arkansas	289	24,802	294	375	2,295	3,377
California	26,755	377,967	27,218	22,372	35,085	56,405
Colorado	381	5,537	451	385	642	667
Connecticut	1,136	16,762	569	1,485	1,873	1,769
Delaware	256	16,090	700	682	356	667
District of Columbia	0	0	0	0	0	0
Florida	19,082	296,940	21,716	14,283	21,226	26,875
Georgia	102	7,341	49	124	308	1,160
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	4,014	44,606	5,019	3,906	3,796	2,374
Indiana	87	5,141	152	234	312	268
Iowa	264	4,123	207	251	457	234
Kansas	545	25,822	1,993	2,480	2,646	2,113
Kentucky	86	2,194	158	190	201	181
Louisiana	15,171	277,431	16,810	14,557	22,089	30,559
Maine	0	0	0	0	0	0
Maryland	191	11,004	209	364	750	623
Massachusetts	2,241	51,486	2,419	3,186	3,140	4,800
Michigan	3,239	33,288	3,028	3,135	3,243	2,921
Minnesota	119	6,097	112	139	382	289
Mississippi	3,092	73,081	4,576	4,062	5,433	8,119
Missouri	135	7,464	311	340	557	749
Montana	1	420	21	30	40	27
Nebraska	37	2,656	34	77	354	263
Nevada	3,027	51,776	3,651	1,804	4,368	6,212
New Hampshire	0	564	31	24	54	54
New Jersey	528	29,528	553	1,341	2,087	1,349
New Mexico	1,918	33,376	1,999	2,225	3,227	2,835
New York	16,724	217,493	14,715	12,693	16,569	19,701
North Carolina	11	4,511	3	25	507	433
North Dakota	0	1	0	0	0	0
Ohio	114	3,485	122	246	397	268
Oklahoma	6,460	128,822	11,407	8,236	10,068	14,026
Oregon	1,471	10,686	1,641	920	2,368	2,367
Pennsylvania	225	7,368	365	212	301	418
Rhode Island	2,613	27,162	2,604	2,490	2,505	2,365
South Carolina	33	2,731	35	112	240	212
South Dakota	63	1,730	83	90	45	88
Tennessee	0	1,635	0	0	209	0
Texas	54,351	1,056,582	69,623	72,461	90,971	126,102
Utah	153	4,079	178	174	135	912
Vermont	65	36	4	2	4	2
Virginia	853	11,571	918	381	789	583
Washington	492	2,619	187	220	164	1,191
West Virginia	21	219	11	2	17	15
Wisconsin	418	15,772	467	400	743	697
Wyoming	7	95	15	15	6	5
Total	170,946	2,968,985	198,522	180,102	246,040	332,925

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	2,373	2,898	930	482	386	168
Alaska	2,439	2,734	2,579	2,902	2,923	3,593
Arizona	4,809	4,114	1,931	2,740	723	588
Arkansas	5,270	7,484	3,443	575	606	250
California	48,127	43,831	26,461	37,116	25,337	24,348
Colorado	716	703	337	393	264	326
Connecticut	2,362	2,474	1,400	1,169	1,260	967
Delaware	1,592	2,000	1,096	1,063	1,841	2,279
District of Columbia	0	0	0	0	0	0
Florida	33,664	33,336	31,395	29,651	28,108	28,965
Georgia	2,200	2,592	440	203	177	30
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	3,806	7,977	4,586	2,897	4,921	2,474
Indiana	530	1,863	796	232	221	220
Iowa	371	838	393	270	254	383
Kansas	3,491	6,349	3,142	1,237	847	558
Kentucky	312	525	170	21	117	130
Louisiana	34,584	39,937	29,959	25,574	19,124	15,862
Maine	0	0	0	0	0	0
Maryland	1,051	3,379	1,856	725	1,478	336
Massachusetts	5,595	6,031	6,223	3,821	6,630	5,273
Michigan	2,851	3,675	2,753	2,748	2,263	2,413
Minnesota	669	1,134	684	594	619	695
Mississippi	11,937	14,001	8,382	4,685	3,033	2,930
Missouri	1,212	2,789	1,022	95	173	77
Montana	46	115	8	7	15	18
Nebraska	364	878	218	108	172	81
Nevada	7,833	7,257	5,269	5,215	3,517	3,820
New Hampshire	70	11	319	0	0	0
New Jersey	4,239	8,143	4,610	1,478	1,868	2,091
New Mexico	4,338	4,022	2,922	2,443	2,547	2,768
New York	29,767	35,237	28,198	16,938	11,475	14,741
North Carolina	747	1,887	811	61	26	1
North Dakota	0	1	0	0	0	0
Ohio	304	1,073	596	106	107	71
Oklahoma	20,504	20,851	12,246	6,710	7,023	6,677
Oregon	2,531	306	126	3	0	171
Pennsylvania	923	2,722	886	294	326	324
Rhode Island	2,424	2,003	2,184	2,445	1,854	2,179
South Carolina	422	921	621	67	72	12
South Dakota	228	581	360	85	85	39
Tennessee	328	843	255	0	0	0
Texas	141,943	144,449	103,279	73,212	59,300	60,371
Utah	1,087	824	25	147	143	155
Vermont	4	4	3	3	3	3
Virginia	1,476	2,536	1,350	670	1,497	1,133
Washington	731	25	1	86	5	0
West Virginia	9	23	40	33	9	23
Wisconsin	895	2,168	1,686	1,851	1,768	2,154
Wyoming	3	4	13	6	6	6
Total	391,176	427,549	296,004	231,162	193,124	189,704

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility[a] Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997		1996			
	February	January	Total	December	November	October
Alabama	156	125	6,146	291	480	384
Alaska	2,438	3,221	31,767	3,078	2,683	2,637
Arizona	358	319	19,248	443	296	2,242
Arkansas	214	619	33,988	1,226	297	201
California	14,189	17,478	318,035	17,182	22,900	32,454
Colorado	259	395	5,511	454	319	506
Connecticut	1,238	197	10,456	131	912	1,643
Delaware	2,068	1,746	23,370	1,048	2,129	2,330
District of Columbia	0	0	0	0	0	0
Florida	17,145	10,578	283,557	13,124	17,908	28,677
Georgia	18	42	4,674	43	80	9
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	1,661	1,188	25,863	550	1,859	1,046
Indiana	151	162	4,330	236	256	144
Iowa	218	247	3,491	236	232	211
Kansas	413	553	22,607	672	578	808
Kentucky	80	111	1,836	82	104	65
Louisiana	13,616	14,761	252,139	12,921	14,958	18,877
Maine	0	0	0	0	0	0
Maryland	47	185	8,455	211	263	485
Massachusetts	2,793	1,575	45,037	1,562	3,081	8,648
Michigan	2,356	1,901	32,559	2,888	3,151	2,705
Minnesota	123	656	5,301	419	403	469
Mississippi	2,716	3,207	83,251	3,671	6,561	5,392
Missouri	52	85	5,223	69	238	193
Montana	27	64	470	72	85	42
Nebraska	77	31	2,351	82	94	122
Nevada	1,362	1,468	46,766	2,311	2,458	4,266
New Hampshire	0	0	3	0	1	0
New Jersey	1,023	746	25,825	445	1,038	1,481
New Mexico	1,990	2,059	29,969	2,244	2,423	2,787
New York	12,486	4,972	142,688	5,108	10,715	14,459
North Carolina	9	0	2,381	1	1	112
North Dakota	0	0	3	0	0	0
Ohio	71	125	2,867	106	259	56
Oklahoma	4,843	6,231	136,436	6,107	8,068	9,395
Oregon	0	253	14,015	334	1,289	3,049
Pennsylvania	316	281	7,239	282	654	650
Rhode Island	2,021	2,088	25,071	2,167	2,449	2,424
South Carolina	4	11	1,206	20	16	23
South Dakota	19	26	725	35	80	5
Tennessee	0	0	572	0	1	0
Texas	54,877	59,992	1,039,155	51,332	59,062	75,410
Utah	137	161	3,428	142	130	133
Vermont	2	2	24	3	3	3
Virginia	47	190	10,275	333	193	473
Washington	2	6	6,590	21	358	801
West Virginia	23	12	205	43	3	1
Wisconsin	1,773	1,169	7,303	702	803	572
Wyoming	7	9	87	6	6	7
Total	143,428	139,250	2,732,496	132,434	169,879	226,394

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				April	March	February
Alabama	116,782	109,764	121,468	24,298	29,592	29,830
Alaska	51,856	57,015	53,635	11,872	13,040	12,516
Arizona	49,010	41,452	39,779	10,115	12,001	12,168
Arkansas	90,716	91,444	100,527	19,046	24,796	23,129
California	697,104	636,573	597,742	150,888	151,886	190,777
Colorado	NA	NA	129,472	NA	NA	31,209
Connecticut	55,067	58,948	56,816	10,871	13,255	14,383
Delaware	15,306	21,896	21,337	3,298	4,030	3,776
District of Columbia	16,787	16,404	18,038	3,025	4,064	4,747
Florida	141,346	150,704	140,031	32,801	36,986	R32,925
Georgia	145,273	144,906	162,651	25,861	37,321	39,542
Hawaii	927	917	967	223	221	232
Idaho	27,848	26,812	26,372	5,684	6,585	7,284
Illinois	444,440	510,503	538,931	79,927	110,485	107,855
Indiana	NA	247,518	258,259	NA	62,620	57,078
Iowa	109,664	113,381	119,758	20,383	30,256	25,941
Kansas	106,001	111,906	118,522	19,364	29,491	26,029
Kentucky	83,511	90,839	98,569	14,076	21,967	21,257
Louisiana	421,465	425,597	448,820	101,836	110,398	R97,310
Maine	2,515	2,685	2,556	470	610	658
Maryland	103,043	86,164	89,576	14,145	27,315	28,426
Massachusetts	146,842	167,219	151,595	29,256	36,408	R38,350
Michigan	410,329	455,401	484,051	77,995	106,043	106,517
Minnesota	141,412	164,202	166,744	21,649	37,306	36,306
Mississippi	NA	64,050	74,063	NA	NA	17,463
Missouri	130,932	143,711	153,265	21,664	33,690	34,874
Montana	22,511	25,441	25,434	4,240	5,477	5,313
Nebraska	53,565	59,749	59,898	9,830	13,612	13,802
Nevada	46,662	42,326	41,983	11,035	11,071	11,832
New Hampshire	9,420	9,723	9,506	1,864	2,183	2,585
New Jersey	248,945	267,488	282,075	47,096	65,242	66,099
New Mexico	50,731	49,120	44,954	10,367	12,865	11,205
New York	NA	535,170	NA	79,323	NA	NA
North Carolina	95,040	88,693	92,547	17,721	23,352	25,906
North Dakota	15,273	18,141	16,359	2,804	3,853	3,944
Ohio	379,206	420,042	456,845	67,612	98,218	99,776
Oklahoma	160,901	162,375	171,385	32,204	43,151	40,846
Oregon	NA	60,806	55,305	NA	NA	17,736
Pennsylvania	NA	310,361	337,800	NA	72,421	75,456
Rhode Island	NA	33,579	30,262	NA	7,900	7,949
South Carolina	63,184	57,019	58,095	12,349	15,673	17,097
South Dakota	13,742	16,693	16,830	2,244	3,588	3,464
Tennessee	NA	NA	119,207	21,904	31,153	28,238
Texas	1,084,449	1,121,901	1,214,120	265,438	R285,133	R248,941
Utah	61,394	60,263	57,074	12,218	14,697	16,652
Vermont	3,921	3,968	3,704	716	918	1,085
Virginia	99,351	99,682	107,661	18,956	25,191	27,386
Washington	NA	92,201	92,869	NA	NA	NA
West Virginia	47,281	49,530	53,955	9,140	R12,281	R12,727
Wisconsin	162,604	189,216	192,694	27,884	44,076	39,114
Wyoming	NA	29,187	28,389	NA	NA	NA
Total	7,618,420	7,978,561	8,232,463	1,539,792	R1,941,000	R1,929,786

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	33,062	298,692	30,497	24,708	21,550	21,022
Alaska	14,428	R149,454	R15,194	R12,577	R13,135	R8,860
Arizona	14,726	112,612	11,607	7,012	6,690	10,654
Arkansas	23,745	243,839	23,868	19,870	17,463	16,495
California	203,553	1,849,819	186,761	145,591	139,946	162,462
Colorado	34,278	NA	NA	NA	NA	NA
Connecticut	16,558	R132,979	15,668	11,727	R8,456	6,691
Delaware	4,203	46,397	4,350	3,196	2,090	2,190
District of Columbia	4,951	32,732	4,605	2,768	1,452	1,245
Florida	R38,634	481,758	39,073	29,623	35,594	40,869
Georgia	42,548	350,085	40,563	35,202	23,556	20,016
Hawaii	252	2,692	230	293	209	206
Idaho	8,295	61,769	7,188	5,520	4,450	3,482
Illinois	146,173	1,064,270	132,686	111,168	70,463	42,621
Indiana	R68,688	556,723	68,314	53,950	36,918	27,578
Iowa	33,082	247,128	30,098	24,723	17,401	11,705
Kansas	R31,116	269,575	30,998	24,659	15,783	13,484
Kentucky	26,211	204,648	26,970	21,324	14,326	9,949
Louisiana	111,920	1,337,463	109,377	101,574	109,871	116,287
Maine	777	6,247	733	692	486	329
Maryland	33,158	202,721	31,215	17,537	11,517	9,389
Massachusetts	42,828	379,218	38,422	30,307	23,079	20,467
Michigan	119,774	936,410	111,072	88,305	55,632	41,554
Minnesota	46,151	339,424	40,348	36,525	21,652	12,960
Mississippi	NA	NA	18,874	15,871	14,057	NA
Missouri	40,704	275,142	35,563	24,674	12,066	9,892
Montana	7,480	53,469	7,288	5,208	3,676	2,248
Nebraska	16,322	124,391	13,794	9,888	6,785	5,118
Nevada	R12,723	R126,547	R12,298	R7,731	R9,078	R10,632
New Hampshire	2,788	21,006	2,442	1,785	1,291	918
New Jersey	70,507	592,136	68,929	50,492	34,828	28,939
New Mexico	16,294	120,759	16,263	10,735	7,477	6,667
New York	NA	1,290,701	128,789	102,978	76,363	74,703
North Carolina	28,061	212,766	25,256	18,008	13,573	12,137
North Dakota	4,673	34,445	3,774	3,211	1,875	1,327
Ohio	113,599	R886,786	108,921	85,201	56,541	37,252
Oklahoma	44,699	450,167	44,734	33,511	29,633	33,919
Oregon	21,237	R160,032	R19,576	R14,544	13,513	R12,257
Pennsylvania	75,437	R653,412	79,331	62,304	40,177	28,814
Rhode Island	9,352	82,097	8,705	7,313	5,310	4,739
South Carolina	18,065	R151,658	16,684	12,984	10,286	11,465
South Dakota	4,445	32,342	3,736	3,059	1,587	1,153
Tennessee	NA	NA	31,651	20,204	16,202	16,619
Texas	R284,937	NA	300,576	272,820	278,581	NA
Utah	17,827	137,598	20,208	13,507	10,682	6,491
Vermont	1,202	8,055	988	724	529	345
Virginia	27,819	R230,682	28,898	19,787	13,199	11,565
Washington	NA	NA	NA	NA	NA	NA
West Virginia	R13,133	114,609	14,147	11,362	7,498	6,025
Wisconsin	51,531	397,071	47,427	41,410	26,493	16,641
Wyoming	NA	71,175	6,697	6,583	5,250	3,538
Total	R2,207,842	R20,032,927	R2,133,438	R1,720,475	R1,382,607	R1,299,734

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	23,525	24,635	20,567	22,424	23,941	24,993
Alaska	R10,572	R10,563	R10,423	R11,115	R12,759	R15,201
Arizona	9,864	9,318	7,231	8,784	7,634	10,327
Arkansas	19,314	21,430	17,499	16,456	18,079	20,701
California	155,621	154,451	125,478	142,936	143,180	153,401
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	7,568	7,758	7,207	8,957	13,002	14,461
Delaware	2,970	3,505	2,852	3,347	4,765	5,651
District of Columbia	1,226	1,202	1,513	2,317	2,158	4,232
Florida	47,412	47,771	45,693	45,019	43,877	44,868
Georgia	21,344	21,371	19,045	24,082	29,290	30,048
Hawaii	201	218	211	207	215	226
Idaho	3,021	3,441	3,556	4,298	5,685	6,454
Illinois	40,557	46,870	44,620	64,781	89,460	117,095
Indiana	26,544	26,996	29,386	39,518	46,657	58,071
Iowa	11,634	11,505	11,581	15,100	20,283	25,468
Kansas	16,116	23,844	15,726	17,059	21,157	25,250
Kentucky	9,434	9,646	9,592	12,569	15,682	19,924
Louisiana	121,396	123,951	115,741	113,669	107,263	102,673
Maine	294	271	323	434	562	702
Maryland	10,095	12,430	11,965	12,410	17,306	20,426
Massachusetts	22,754	23,347	28,231	25,392	38,213	42,550
Michigan	39,709	26,729	47,754	70,254	87,580	111,995
Minnesota	14,158	14,512	14,920	20,146	28,959	40,103
Mississippi	NA	NA	16,531	13,189	13,005	14,795
Missouri	10,007	12,149	11,954	15,126	24,138	28,568
Montana	2,129	1,983	2,266	3,230	4,531	5,832
Nebraska	6,824	8,142	5,797	8,296	11,121	13,855
Nevada	R12,185	R11,535	R9,932	R10,829	R9,548	R11,806
New Hampshire	893	810	1,302	1,843	2,115	2,437
New Jersey	32,427	35,789	33,917	39,326	50,239	74,024
New Mexico	8,136	7,917	6,160	8,284	7,848	11,457
New York	86,863	97,493	93,399	94,944	111,890	134,862
North Carolina	12,973	13,611	13,375	15,140	17,647	19,958
North Dakota	1,314	1,159	1,384	2,260	3,140	4,558
Ohio	34,992	35,483	R48,691	59,664	75,370	98,118
Oklahoma	41,269	40,796	33,405	30,523	34,088	37,995
Oregon	R12,512	R9,480	R7,816	9,529	R11,918	R14,443
Pennsylvania	R27,734	29,436	30,381	44,874	60,019	73,750
Rhode Island	4,757	5,072	5,713	6,909	7,506	8,621
South Carolina	R10,162	R10,374	10,987	11,697	12,329	13,572
South Dakota	1,210	1,397	1,503	2,004	2,900	3,604
Tennessee	16,625	14,883	NA	18,028	21,621	NA
Texas	336,135	333,317	288,867	263,252	251,146	285,767
Utah	6,865	6,734	5,981	6,869	11,451	13,240
Vermont	293	285	354	569	782	1,048
Virginia	14,326	14,545	11,949	16,730	20,370	21,630
Washington	NA	NA	NA	18,287	16,880	23,019
West Virginia	6,001	5,547	6,088	8,410	12,384	9,734
Wisconsin	15,927	16,856	16,978	26,124	33,702	46,172
Wyoming	4,271	4,475	4,900	6,272	6,374	6,938
Total	R1,372,992	R1,396,500	R1,305,771	R1,442,849	R1,633,913	R1,929,858

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998

(Million Cubic Feet) — Continued

State	1997		1996			
	February	January	Total	December	November	October
Alabama	29,657	31,172	293,084	27,094	22,883	21,529
Alaska	R13,022	R16,033	150,877	15,528	13,584	12,633
Arizona	11,108	12,383	103,037	10,289	7,516	7,435
Arkansas	24,893	27,771	252,585	23,939	18,699	14,990
California	162,740	177,251	1,721,217	166,541	147,022	138,842
Colorado	NA	NA	269,006	33,157	22,968	13,807
Connecticut	16,153	15,331	126,488	13,888	10,932	8,990
Delaware	5,917	5,563	54,020	4,253	4,459	4,236
District of Columbia	4,971	5,042	33,644	4,731	2,448	1,382
Florida	33,719	28,239	478,471	29,697	33,713	43,317
Georgia	40,351	45,217	374,882	42,005	36,037	24,688
Hawaii	237	239	2,672	220	200	209
Idaho	7,128	7,546	61,058	6,736	5,424	4,267
Illinois	132,731	171,217	1,104,972	149,698	121,461	65,883
Indiana	64,849	77,941	561,056	64,588	52,504	35,148
Iowa	28,940	38,690	260,140	33,840	27,088	15,392
Kansas	29,831	35,669	275,508	33,619	24,789	13,341
Kentucky	23,491	31,742	207,529	25,797	22,270	12,879
Louisiana	104,512	111,149	1,382,966	108,393	NA	NA
Maine	643	778	5,722	601	619	478
Maryland	23,169	25,264	189,901	22,026	16,766	10,847
Massachusetts	44,676	41,780	355,609	36,513	31,385	28,511
Michigan	120,468	135,357	980,555	114,489	91,489	55,831
Minnesota	43,694	51,447	348,671	47,484	36,773	21,889
Mississippi	17,431	18,819	216,524	16,183	16,579	14,771
Missouri	45,769	45,237	286,814	37,323	24,218	12,436
Montana	6,646	8,432	55,584	7,466	5,870	3,712
Nebraska	16,008	18,765	128,297	16,087	10,994	8,322
Nevada	R9,961	R11,012	122,449	10,973	9,050	8,977
New Hampshire	2,626	2,545	19,031	2,155	1,895	1,144
New Jersey	65,637	77,588	599,810	76,491	50,284	33,981
New Mexico	13,677	16,137	113,059	13,633	10,437	7,281
New York	148,697	139,721	1,121,742	NA	NA	NA
North Carolina	25,811	25,277	205,783	23,182	17,666	14,099
North Dakota	5,115	5,328	32,670	4,544	3,497	1,900
Ohio	113,373	133,181	915,035	111,994	87,340	54,686
Oklahoma	43,503	46,790	460,373	42,614	33,004	30,251
Oregon	R15,716	R18,728	160,626	17,626	15,293	14,369
Pennsylvania	84,428	92,163	684,022	80,392	65,415	41,287
Rhode Island	8,649	8,803	82,041	8,359	7,830	6,999
South Carolina	15,461	15,657	146,434	15,449	12,527	10,815
South Dakota	4,506	5,684	33,594	4,805	3,425	1,677
Tennessee	34,363	33,577	256,053	30,041	23,454	15,496
Texas	269,998	314,990	3,585,201	284,720	261,074	NA
Utah	16,675	18,897	129,651	16,258	12,727	10,013
Vermont	1,059	1,078	7,325	844	698	440
Virginia	27,864	R29,819	230,140	28,550	20,832	12,795
Washington	24,824	27,478	231,767	26,206	21,913	17,092
West Virginia	13,142	14,271	115,622	13,051	10,306	7,541
Wisconsin	48,115	61,227	398,581	50,811	43,208	25,032
Wyoming	6,883	8,992	73,609	8,146	7,382	6,411
Total	R2,085,746	R2,329,043	20,005,508	2,086,126	1,731,770	1,377,692

R = Revised Data.
NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				1997
				April	March	February	January	Total
Alabama	3.08	3.86	3.22	3.20	3.03	2.93	3.18	3.65
Alaska	1.73	1.84	1.58	1.71	1.73	1.72	1.75	1.81
Arizona	2.48	3.16	2.12	2.75	2.55	2.28	2.46	3.15
Arkansas	3.02	3.31	2.53	2.96	3.13	2.85	3.09	3.23
California	2.30	3.05	2.29	2.33	2.38	2.12	2.35	2.98
Colorado	NA	NA	2.23	NA	NA	NA	NA	NA
Connecticut	5.24	5.46	5.22	5.89	4.87	5.24	5.23	R5.11
Delaware	2.76	4.21	3.61	2.63	2.73	3.02	2.71	R3.57
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.52	4.27	3.80	3.92	3.25	3.20	3.81	3.97
Georgia	3.48	4.09	3.61	3.63	3.85	3.18	3.43	3.99
Hawaii	5.90	6.88	5.59	5.21	6.25	5.75	6.40	6.44
Idaho	1.90	2.14	2.07	1.96	1.81	1.94	1.89	2.12
Illinois	2.82	3.19	3.20	2.90	2.81	2.85	2.78	3.28
Indiana	NA	3.14	3.12	NA	2.32	2.48	2.49	3.02
Iowa	3.52	3.51	2.85	3.33	3.42	3.33	3.80	4.05
Kansas	3.00	3.48	2.76	2.79	2.86	2.73	3.56	NA
Kentucky	3.28	3.75	3.22	3.99	3.23	3.09	3.22	3.83
Louisiana	2.48	3.21	3.33	2.29	2.53	R2.25	2.81	3.05
Maine	3.25	4.17	4.20	3.25	3.25	3.25	3.25	3.84
Maryland	3.46	3.70	3.65	4.37	3.44	3.43	2.96	4.01
Massachusetts	3.28	3.59	3.44	3.48	3.30	2.89	3.40	3.95
Michigan	2.90	3.17	3.01	2.78	2.97	2.89	2.94	2.99
Minnesota	3.05	3.47	2.81	2.95	3.00	2.90	3.27	3.67
Mississippi	NA	3.54	3.32	NA	NA	2.99	NA	NA
Missouri	3.06	3.51	2.65	3.72	2.97	2.99	2.96	3.74
Montana	2.50	3.34	2.83	2.29	2.50	2.41	2.71	3.16
Nebraska	3.38	3.59	2.67	3.29	2.98	2.70	4.71	4.24
Nevada	3.07	3.48	2.53	3.00	3.29	3.00	3.03	3.39
New Hampshire	3.73	4.24	4.07	3.37	3.93	3.74	3.77	4.10
New Jersey	3.70	4.11	3.62	3.54	3.53	3.38	4.37	4.17
New Mexico	2.16	2.63	1.48	2.19	2.20	2.02	2.24	2.53
New York	NA	NA	3.47	3.01	NA	NA	NA	NA
North Carolina	3.60	4.03	3.69	3.91	3.49	3.47	3.65	3.97
North Dakota	2.89	3.34	2.73	2.86	2.91	2.85	2.93	3.38
Ohio	4.69	5.32	3.87	4.89	4.87	4.27	4.82	5.16
Oklahoma	2.58	3.27	2.55	2.36	2.38	2.61	2.86	3.12
Oregon	NA	2.35	2.10	NA	NA	2.31	2.53	2.58
Pennsylvania	NA	3.89	3.37	NA	5.26	3.64	3.68	R4.08
Rhode Island	NA	4.00	3.65	NA	3.38	3.35	3.93	4.49
South Carolina	3.32	3.71	3.92	3.66	3.34	3.05	3.37	3.81
South Dakota	3.29	3.60	2.70	4.37	2.60	3.66	3.22	3.66
Tennessee	NA	NA	4.00	6.62	2.42	3.84	NA	NA
Texas	3.01	3.87	3.13	2.94	2.84	2.87	3.26	3.67
Utah	3.30	2.60	2.19	2.89	3.23	3.68	3.25	2.79
Vermont	2.71	2.04	2.90	2.74	2.92	2.66	2.59	2.33
Virginia	3.63	4.09	3.58	3.64	3.25	3.63	3.97	4.13
Washington	NA	2.71	2.06	NA	NA	NA	NA	NA
West Virginia	3.06	3.14	3.16	3.61	R2.58	3.15	3.34	3.16
Wisconsin	3.24	3.52	2.95	3.54	3.33	2.99	3.21	3.80
Wyoming	NA	3.25	2.43	3.05	3.29	3.31	NA	3.13
Total	3.20	3.63	3.17	3.22	3.22	R3.08	3.28	R3.61

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	December	November	October	September	August	July	June	May
Alabama	2.60	3.97	4.17	3.83	3.88	4.10	3.86	3.54
Alaska	1.82	1.82	1.78	1.79	1.73	1.74	1.70	1.78
Arizona	2.53	3.48	3.80	3.74	3.16	2.98	3.32	3.18
Arkansas	3.19	3.44	3.61	2.87	3.28	2.78	2.77	2.59
California	2.65	3.30	3.18	2.74	2.79	3.72	2.67	2.55
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	R5.55	3.87	R4.96	5.29	5.33	4.55	4.76	4.81
Delaware	2.40	5.73	5.23	R1.44	R3.17	3.51	3.44	3.20
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.85	4.45	4.64	3.82	3.31	3.41	3.50	3.09
Georgia	3.67	4.04	4.03	5.29	3.90	3.96	4.37	3.20
Hawaii	6.23	—	6.09	6.11	6.35	6.59	5.46	6.47
Idaho	1.79	2.07	2.01	2.17	2.50	2.16	2.83	2.98
Illinois	2.92	3.72	4.07	3.78	3.37	2.81	3.11	3.06
Indiana	2.64	3.21	3.88	3.15	2.87	2.54	2.35	2.32
Iowa	4.44	4.84	4.99	5.39	5.86	6.62	4.74	3.49
Kansas	NA	4.29	3.61	3.47	3.11	2.88	3.02	2.85
Kentucky	4.07	4.28	3.89	3.57	3.62	3.68	3.69	3.30
Louisiana	2.85	3.73	3.43	3.01	2.56	2.58	2.63	2.40
Maine	3.10	2.72	4.11	3.79	4.43	4.34	4.53	4.69
Maryland	3.37	4.22	4.69	5.77	6.05	5.81	4.34	4.15
Massachusetts	4.03	4.14	4.52	4.58	4.91	5.29	5.61	2.86
Michigan	3.19	3.51	3.12	2.87	2.63	2.54	2.69	2.60
Minnesota	4.06	4.52	4.26	4.02	2.97	3.92	3.49	2.64
Mississippi	3.31	3.83	NA	NA	NA	NA	2.95	2.43
Missouri	3.13	3.91	4.63	5.08	4.79	4.61	5.31	3.95
Montana	2.51	3.15	4.47	3.76	3.96	3.63	3.91	2.28
Nebraska	5.31	6.30	5.76	7.03	5.51	4.96	4.09	3.11
Nevada	2.84	3.71	3.46	4.12	3.99	3.87	3.64	2.72
New Hampshire	3.72	4.02	3.95	3.79	4.45	4.28	4.34	3.66
New Jersey	3.77	4.49	4.74	4.22	4.41	4.29	4.21	3.86
New Mexico	2.31	2.85	2.59	2.62	2.18	2.13	2.13	2.04
New York	NA	NA	NA	3.42	R3.07	R2.83	R2.96	NA
North Carolina	3.72	4.09	3.95	4.13	3.96	3.90	3.84	3.83
North Dakota	3.01	4.01	3.73	3.53	3.36	3.14	3.17	2.95
Ohio	4.35	4.66	5.09	4.91	5.51	7.16	6.17	5.96
Oklahoma	3.32	3.19	3.04	2.58	2.66	3.23	2.66	2.22
Oregon	2.42	2.73	2.48	3.12	4.01	3.45	3.00	3.02
Pennsylvania	3.71	4.32	4.60	4.56	R4.95	4.03	4.90	4.30
Rhode Island	4.02	4.46	4.53	5.71	6.64	7.53	6.42	4.81
South Carolina	3.72	4.13	4.15	4.03	3.86	3.74	3.78	3.54
South Dakota	3.46	3.68	3.53	4.03	4.26	4.40	4.58	3.75
Tennessee	3.63	R4.37	R3.93	2.78	2.51	2.71	NA	2.96
Texas	3.97	3.86	3.58	3.21	3.11	3.23	3.01	2.50
Utah	3.46	3.07	2.64	2.81	3.02	2.83	2.35	1.93
Vermont	2.64	2.77	2.34	2.29	2.33	2.41	2.58	2.77
Virginia	3.65	4.15	4.83	4.69	4.47	3.94	3.77	5.12
Washington	NA	NA	NA	NA	NA	NA	NA	2.53
West Virginia	2.99	3.07	3.66	3.53	3.89	1.85	3.90	3.02
Wisconsin	4.93	3.75	3.91	4.52	4.75	3.68	4.82	3.39
Wyoming	3.20	3.61	3.02	3.35	2.90	2.94	2.85	1.64
Total	R3.49	R3.93	R3.92	3.60	R3.43	R3.54	R3.40	3.16

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997				1996			
	April	March	February	January	Total	December	November	October
Alabama	3.16	3.20	4.02	4.44	3.48	4.07	3.61	3.44
Alaska	1.81	1.84	1.80	1.88	1.58	1.59	1.60	1.55
Arizona	2.61	2.22	2.85	4.21	2.78	4.14	3.32	2.66
Arkansas	2.48	2.46	3.16	4.18	2.76	3.68	3.04	2.46
California	2.30	2.25	3.21	4.14	2.59	3.81	3.00	2.37
Colorado	NA	NA	NA	NA	2.70	4.91	3.13	2.58
Connecticut	4.94	4.82	6.00	5.82	5.11	6.15	4.60	4.46
Delaware	3.00	R3.69	R4.48	R5.66	3.68	4.96	3.66	2.94
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.62	4.04	4.56	4.61	3.73	4.80	3.90	3.28
Georgia	3.08	3.31	4.15	4.80	3.77	4.65	3.71	3.17
Hawaii	7.21	6.50	7.73	6.16	6.05	6.67	6.30	6.33
Idaho	2.08	1.85	2.13	2.37	2.24	2.30	2.10	2.11
Illinois	2.48	2.43	3.30	3.79	3.27	4.05	3.25	2.65
Indiana	2.07	2.31	3.20	4.08	3.09	3.83	3.16	2.49
Iowa	2.83	3.05	3.66	3.98	3.47	4.09	3.46	3.12
Kansas	2.38	2.67	3.67	4.37	3.05	3.77	3.38	2.91
Kentucky	3.62	3.40	3.47	4.17	3.41	4.40	3.59	2.94
Louisiana	2.36	2.44	3.49	3.84	3.13	4.30	3.24	2.31
Maine	3.43	4.26	3.52	4.96	4.30	4.34	3.64	3.93
Maryland	3.15	3.32	3.75	4.14	4.02	4.65	3.75	3.65
Massachusetts	3.26	2.97	4.12	4.30	3.98	4.82	3.72	3.60
Michigan	2.56	2.66	3.28	3.98	2.90	3.73	3.07	2.49
Minnesota	2.41	2.70	3.48	4.51	3.07	3.78	3.19	2.65
Mississippi	2.89	2.82	3.48	4.25	3.27	4.34	3.14	2.67
Missouri	3.11	2.78	3.50	4.05	3.25	4.03	3.20	3.47
Montana	3.09	2.70	3.50	3.73	3.03	3.46	3.04	3.08
Nebraska	2.28	3.02	3.75	4.42	3.07	3.99	3.11	2.93
Nevada	2.81	2.96	3.37	4.13	3.10	3.97	3.46	2.96
New Hampshire	3.15	3.99	4.42	4.93	4.20	5.01	4.15	3.19
New Jersey	3.15	3.99	4.20	4.70	3.84	4.82	3.83	3.25
New Mexico	1.91	1.38	2.39	3.85	1.99	3.60	2.68	1.88
New York	NA	NA	NA	NA	3.36	4.38	3.03	2.86
North Carolina	3.40	3.51	4.34	4.36	3.74	4.26	3.48	3.22
North Dakota	2.50	2.43	3.59	4.22	2.94	3.80	3.10	2.49
Ohio	5.79	5.01	5.41	5.24	4.37	4.79	4.95	5.06
Oklahoma	2.22	3.09	3.68	3.52	2.56	2.84	2.44	1.99
Oregon	1.95	1.92	2.35	2.95	2.42	2.95	2.41	2.24
Pennsylvania	3.48	3.48	4.12	4.22	3.77	4.24	3.92	3.85
Rhode Island	3.46	3.16	4.26	4.85	4.41	5.20	4.04	3.91
South Carolina	3.25	2.95	3.97	4.20	3.90	4.60	3.76	3.26
South Dakota	3.02	2.78	3.95	4.10	3.19	3.98	3.37	2.87
Tennessee	2.51	NA	3.73	4.10	4.04	6.64	3.71	2.92
Texas	2.38	3.01	4.16	4.70	3.22	4.21	3.49	2.73
Utah	2.15	2.69	2.76	2.65	2.25	2.39	3.32	1.66
Vermont	2.39	2.26	2.16	1.57	2.74	2.67	2.49	2.18
Virginia	3.28	3.49	3.96	5.04	3.89	5.13	3.69	3.34
Washington	2.70	1.89	2.62	3.45	2.44	3.14	2.50	1.94
West Virginia	2.88	2.17	3.54	3.61	3.36	3.53	3.25	3.57
Wisconsin	3.12	2.89	3.54	4.13	3.43	4.12	3.61	3.17
Wyoming	2.48	3.19	3.61	4.22	2.36	2.55	2.18	1.91
Total	2.94	3.06	3.78	4.27	3.34	4.18	3.46	2.94

R = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				1997
				April	March	February	January	Total
Alabama	7.27	8.01	6.44	7.73	7.00	7.10	7.41	8.39
Alaska	3.64	3.69	3.33	3.66	3.71	3.65	3.56	3.78
Arizona	7.47	6.94	6.90	8.14	7.39	7.40	7.23	7.80
Arkansas	7.28	6.27	5.32	6.86	6.41	6.50	9.42	6.64
California	6.85	6.29	6.29	6.80	6.78	6.49	7.28	6.82
Colorado	NA	NA	4.14	NA	NA	NA	NA	NA
Connecticut	10.20	10.33	9.92	9.78	10.18	10.33	10.36	10.31
Delaware	8.17	7.82	6.43	8.51	8.15	8.08	8.07	8.42
District of Columbia	8.72	9.22	8.83	8.86	8.62	8.44	9.01	9.47
Florida	10.61	11.27	9.56	11.34	10.51	10.47	10.33	12.71
Georgia	6.25	7.14	5.76	7.09	5.78	6.15	6.40	7.45
Hawaii	19.90	22.62	18.79	19.21	19.87	20.46	19.99	21.71
Idaho	5.15	4.89	5.06	5.38	5.18	5.14	5.01	5.11
Illinois	5.03	5.89	4.68	5.79	4.90	4.91	4.88	5.95
Indiana	NA	6.13	4.98	NA	6.13	7.04	R6.12	6.37
Iowa	5.30	5.64	4.71	6.36	4.79	4.97	5.49	6.27
Kansas	5.82	6.29	5.15	5.92	5.76	5.80	5.82	6.47
Kentucky	5.55	6.14	4.88	6.56	5.25	5.47	5.48	6.48
Louisiana	5.81	6.81	5.95	6.46	5.28	5.60	6.10	7.24
Maine	7.90	8.55	7.65	7.90	7.90	7.90	7.90	8.47
Maryland	7.55	7.66	6.96	8.36	7.53	7.36	7.38	8.21
Massachusetts	9.34	9.68	9.08	9.64	9.37	9.26	9.19	9.54
Michigan	4.87	4.94	4.57	5.11	4.69	4.92	4.85	5.15
Minnesota	5.17	5.64	5.00	5.60	5.18	5.11	5.07	5.79
Mississippi	NA	5.88	5.33	NA	NA	5.39	NA	NA
Missouri	5.97	6.22	5.35	6.14	5.58	5.86	6.30	6.57
Montana	4.98	4.57	4.62	5.15	4.97	5.03	4.87	5.07
Nebraska	5.02	5.58	4.39	5.09	4.74	4.93	5.28	5.87
Nevada	6.73	5.75	5.82	6.90	6.80	6.79	6.53	6.29
New Hampshire	8.03	8.72	7.01	6.50	8.50	8.38	8.30	8.48
New Jersey	7.40	7.55	6.86	7.71	7.39	7.23	7.41	7.85
New Mexico	4.59	5.55	4.15	6.26	4.55	5.23	3.72	5.75
New York	NA	9.94	8.16	9.35	NA	NA	NA	10.32
North Carolina	8.02	8.91	6.82	7.91	7.77	7.93	8.33	9.00
North Dakota	4.73	4.28	4.34	5.12	4.79	4.68	4.52	4.93
Ohio	6.03	6.68	5.24	6.22	5.97	5.75	6.25	6.75
Oklahoma	5.57	6.00	4.96	5.56	5.43	5.73	5.56	6.35
Oregon	NA	5.82	6.06	NA	NA	6.44	6.09	R6.05
Pennsylvania	NA	7.98	6.68	NA	8.05	8.03	9.60	R8.34
Rhode Island	NA	9.22	7.83	NA	9.03	8.86	8.83	9.61
South Carolina	8.13	8.74	7.06	7.88	8.02	8.27	8.17	8.60
South Dakota	5.25	5.16	4.62	5.88	5.31	5.07	5.01	5.75
Tennessee	NA	NA	6.00	6.42	5.96	6.31	NA	NA
Texas	5.80	6.02	5.28	6.29	5.14	6.58	5.42	6.41
Utah	5.55	4.83	4.32	4.85	5.51	5.73	5.83	5.10
Vermont	6.28	6.08	6.06	6.45	6.30	6.23	6.19	6.41
Virginia	8.03	8.22	7.06	8.28	7.75	8.05	8.11	8.83
Washington	NA	5.45	5.45	NA	NA	NA	NA	NA
West Virginia	6.93	6.74	6.71	7.55	R6.85	R6.78	R6.81	6.76
Wisconsin	6.06	6.56	5.87	6.02	6.28	5.98	5.96	6.53
Wyoming	NA	3.93	4.22	5.25	5.13	5.14	NA	4.54
Total	6.43	6.68	5.86	6.73	6.24	6.39	R6.45	R6.93

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	December	November	October	September	August	July	June	May
Alabama	7.32	7.99	11.10	11.62	11.70	11.26	10.45	8.69
Alaska	3.62	3.69	3.75	3.94	4.66	4.43	4.27	3.88
Arizona	7.59	9.17	11.33	9.10	10.54	10.05	9.59	8.68
Arkansas	6.23	6.40	8.66	9.53	9.25	8.64	8.23	6.93
California	7.20	7.49	7.81	7.42	7.57	7.05	7.71	6.38
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	9.18	10.42	11.01	11.58	11.48	11.35	10.71	10.71
Delaware	8.11	8.76	10.81	11.91	11.94	11.69	10.13	8.93
District of Columbia	9.45	11.01	11.27	11.34	8.40	8.46	8.28	9.18
Florida	12.58	13.89	14.79	14.96	15.05	14.65	14.15	13.36
Georgia	6.11	5.95	8.02	10.57	11.75	11.87	12.38	10.42
Hawaii	20.40	20.84	21.04	21.33	21.61	21.17	21.51	21.78
Idaho	4.98	5.28	5.66	6.47	6.51	6.16	5.81	5.26
Illinois	5.39	5.65	6.07	8.00	7.87	7.83	7.93	5.43
Indiana	5.54	5.83	6.95	8.77	9.40	10.18	8.85	7.23
Iowa	6.09	6.52	7.80	11.19	10.25	9.53	8.08	6.21
Kansas	5.96	6.55	7.74	8.54	8.27	7.54	8.03	6.24
Kentucky	6.49	6.19	7.52	7.94	9.22	9.15	7.56	6.67
Louisiana	6.38	7.96	9.44	9.42	8.76	8.41	8.45	7.52
Maine	8.36	8.21	7.80	9.46	9.25	9.69	8.39	7.95
Maryland	7.61	8.71	9.91	10.72	11.35	10.88	9.62	8.26
Massachusetts	10.09	9.78	8.58	10.09	10.39	9.86	8.32	7.49
Michigan	4.93	5.08	5.74	6.81	7.26	6.88	6.15	5.10
Minnesota	5.17	6.12	6.58	7.62	7.17	7.06	6.36	5.32
Mississippi	5.67	6.70	8.29	NA	NA	NA	7.36	6.91
Missouri	6.45	6.68	8.83	9.59	9.38	8.77	7.53	5.88
Montana	5.33	5.42	5.84	6.73	6.98	7.46	6.10	5.00
Nebraska	6.19	6.19	7.53	7.90	7.72	7.43	6.71	4.65
Nevada	6.20	6.74	7.67	7.95	7.99	7.58	7.31	6.63
New Hampshire	8.46	8.87	7.47	8.98	9.17	9.01	7.59	6.62
New Jersey	7.48	7.63	8.52	9.80	9.82	9.62	9.38	8.30
New Mexico	3.61	4.47	8.32	10.84	11.07	11.66	40.76	6.53
New York	10.22	10.65	11.75	12.64	12.84	12.49	10.88	9.51
North Carolina	8.05	8.23	11.20	13.11	13.15	12.42	10.31	8.58
North Dakota	5.57	5.67	6.26	7.54	7.02	7.05	6.37	5.10
Ohio	6.20	6.31	7.40	8.29	8.46	8.71	7.55	6.74
Oklahoma	5.56	6.17	8.93	9.28	9.36	8.95	8.14	6.80
Oregon	5.89	6.15	6.68	R7.07	R7.26	R7.04	R6.82	6.38
Pennsylvania	7.76	7.94	9.01	11.12	R11.69	11.78	10.15	8.88
Rhode Island	8.97	9.74	10.64	12.10	12.53	12.30	10.90	9.70
South Carolina	7.98	8.00	9.53	10.15	10.24	9.73	8.96	8.09
South Dakota	5.94	6.17	6.98	9.10	8.07	8.39	7.83	5.92
Tennessee	6.81	6.89	8.33	8.81	9.00	8.92	NA	6.49
Texas	5.67	6.50	8.07	8.67	8.91	8.38	7.83	6.42
Utah	5.25	5.66	4.62	5.55	5.94	5.61	5.67	5.80
Vermont	6.21	6.43	7.06	8.41	8.78	8.51	7.35	6.52
Virginia	8.42	9.02	11.07	12.27	12.45	12.40	10.70	9.05
Washington	NA	NA	NA	NA	NA	NA	NA	5.69
West Virginia	5.83	6.58	5.98	8.89	9.58	10.39	8.47	7.26
Wisconsin	6.37	7.24	6.07	6.92	6.99	6.58	6.68	5.13
Wyoming	6.24	5.19	5.54	6.09	6.31	5.83	5.25	3.23
Total	6.55	6.85	7.59	R8.64	R8.82	8.55	8.21	6.83

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997				1996			
	April	March	February	January	Total	December	November	October
Alabama	9.21	8.65	7.61	7.62	7.22	7.36	7.83	9.71
Alaska	3.75	3.75	3.67	3.63	3.42	3.32	3.37	3.46
Arizona	7.93	7.03	6.81	6.62	7.52	6.85	7.43	9.28
Arkansas	6.40	6.14	6.09	6.48	5.92	6.64	6.05	7.06
California	6.18	6.42	6.27	6.27	6.44	6.20	6.41	6.67
Colorado	NA	NA	NA	NA	4.39	3.94	4.31	4.99
Connecticut	10.07	9.66	10.96	10.41	10.08	10.49	10.26	10.58
Delaware	8.25	7.94	7.75	7.54	7.12	7.59	7.90	9.08
District of Columbia	8.74	8.57	9.36	9.81	9.19	10.22	9.18	10.25
Florida	12.89	12.12	10.69	10.57	10.74	10.47	11.98	13.01
Georgia	6.23	8.88	7.47	6.53	6.69	6.75	5.83	8.51
Hawaii	21.30	22.29	25.55	21.14	19.81	19.51	20.71	20.95
Idaho	5.10	4.95	4.80	4.81	5.20	4.89	5.22	5.60
Illinois	5.10	5.28	6.50	6.15	5.28	5.13	5.05	5.93
Indiana	6.70	6.28	6.06	5.82	5.54	5.65	5.52	6.55
Iowa	5.24	5.58	6.01	5.57	5.49	5.71	5.30	6.66
Kansas	6.04	5.98	6.58	6.33	5.59	5.75	5.47	6.48
Kentucky	6.84	6.32	6.02	5.87	5.54	6.10	5.73	6.62
Louisiana	6.09	6.28	6.85	7.34	6.76	7.30	7.75	8.31
Maine	9.05	8.65	8.66	8.10	7.84	8.53	8.05	7.04
Maryland	8.14	7.31	7.64	7.68	7.60	7.81	7.30	8.45
Massachusetts	9.90	9.70	9.62	9.55	8.88	9.53	9.52	7.54
Michigan	4.92	4.82	4.94	5.04	4.96	5.07	5.01	5.58
Minnesota	4.66	4.81	5.81	6.50	5.46	6.18	5.47	5.48
Mississippi	6.42	5.49	5.61	6.17	5.72	6.58	6.28	6.35
Missouri	5.31	5.70	6.50	6.67	5.97	6.02	5.94	7.58
Montana	4.73	4.69	4.49	4.47	4.86	4.59	4.89	5.53
Nebraska	4.91	4.86	5.75	6.21	4.88	5.35	5.01	5.59
Nevada	6.16	5.78	5.76	5.54	6.19	5.69	6.05	7.40
New Hampshire	6.62	9.36	9.24	9.10	7.40	8.41	8.67	7.05
New Jersey	7.71	7.42	7.47	7.67	7.16	7.02	7.29	7.66
New Mexico	8.78	4.46	5.09	5.81	4.47	3.72	3.80	5.80
New York	9.11	9.73	10.13	10.43	8.90	NA	NA	NA
North Carolina	8.68	9.59	8.76	8.77	7.59	7.90	8.21	9.93
North Dakota	4.10	4.14	4.32	4.43	4.54	4.34	3.84	4.66
Ohio	6.60	6.51	6.83	6.72	5.90	6.29	6.56	7.29
Oklahoma	5.96	5.66	5.79	6.44	5.64	5.32	5.99	8.12
Oregon	6.04	5.85	5.76	5.73	6.31	5.95	6.30	7.01
Pennsylvania	8.41	8.05	8.05	7.64	7.38	7.60	7.80	8.60
Rhode Island	9.67	9.39	9.18	8.79	8.49	8.68	9.36	9.90
South Carolina	8.36	9.24	8.69	8.67	7.41	7.85	7.50	8.21
South Dakota	4.95	4.83	5.09	5.50	5.25	5.39	5.41	5.94
Tennessee	6.39	NA	7.00	6.84	6.26	6.17	5.93	7.07
Texas	5.66	5.56	6.05	6.35	5.89	6.14	5.34	7.07
Utah	4.16	5.14	4.89	4.91	4.47	4.75	4.81	3.79
Vermont	6.23	6.08	6.04	6.04	6.40	6.19	6.42	7.21
Virginia	8.12	7.56	8.07	8.87	7.94	8.48	8.26	9.78
Washington	5.68	5.48	5.40	5.39	5.65	5.44	5.60	6.09
West Virginia	6.91	6.80	6.67	6.68	7.02	6.80	7.01	7.55
Wisconsin	6.31	5.89	6.61	7.08	6.04	6.87	6.25	5.02
Wyoming	4.73	4.01	3.91	3.51	4.26	3.97	3.75	3.95
Total	6.57	6.53	6.80	6.74	6.34	6.47	6.37	7.05

R = Revised Data.
NA = Not Available.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				1997
				April	March	February	January	Total
Alabama	6.48	7.03	5.89	6.50	6.27	6.47	6.65	7.04
Alaska	2.42	2.52	2.40	2.31	2.39	2.45	2.49	R2.44
Arizona	5.62	5.11	4.97	5.79	5.50	5.59	5.65	5.33
Arkansas	5.14	5.12	4.37	5.23	5.04	5.19	5.14	5.21
California	6.78	6.79	6.40	6.65	7.06	6.75	6.69	6.48
Colorado	NA	NA	3.73	NA	NA	NA	NA	NA
Connecticut	7.37	7.92	7.80	6.86	7.42	7.28	7.73	R7.44
Delaware	6.74	6.48	5.44	6.85	6.75	6.72	6.70	6.78
District of Columbia	7.42	8.30	7.58	7.09	7.46	7.34	7.65	8.05
Florida	6.74	6.77	6.45	6.71	6.69	6.72	6.83	6.94
Georgia	5.81	6.58	5.53	5.53	5.51	5.86	6.16	6.37
Hawaii	13.95	15.20	13.39	13.32	13.66	14.41	14.35	14.97
Idaho	4.48	4.37	4.48	4.76	4.46	4.40	4.41	4.47
Illinois	4.69	5.46	4.44	5.21	4.70	4.25	4.76	5.45
Indiana	NA	5.39	4.32	NA	5.44	5.97	R5.52	5.38
Iowa	4.35	4.93	4.01	5.19	3.72	4.08	4.71	5.23
Kansas	4.99	5.89	4.47	6.08	3.85	5.43	5.44	5.72
Kentucky	5.48	5.72	4.59	5.67	5.44	5.63	5.32	5.79
Louisiana	5.36	6.30	5.78	5.49	4.94	5.24	5.73	6.28
Maine	7.41	8.03	7.06	7.41	7.41	7.41	7.41	7.70
Maryland	6.24	6.37	5.96	6.82	6.15	6.18	6.14	6.47
Massachusetts	7.54	8.09	7.45	7.65	7.46	R7.73	7.39	7.31
Michigan	4.74	4.81	4.51	4.92	4.58	4.76	4.77	4.92
Minnesota	4.46	4.99	4.41	4.53	4.41	4.42	4.50	4.85
Mississippi	NA	5.16	4.79	NA	NA	4.35	NA	NA
Missouri	5.64	5.94	5.13	5.37	5.27	5.63	6.08	5.83
Montana	4.92	4.49	4.53	5.05	4.91	4.97	4.85	4.69
Nebraska	4.93	5.03	4.35	4.42	6.13	4.44	4.66	4.86
Nevada	5.71	4.97	4.84	5.76	5.69	5.76	5.63	5.13
New Hampshire	7.31	8.24	6.68	6.06	7.64	7.57	7.60	7.65
New Jersey	4.25	6.70	6.76	4.17	3.83	4.13	4.85	5.87
New Mexico	4.00	4.55	3.37	4.42	3.91	4.35	3.66	4.45
New York	NA	7.26	NA	6.20	NA	NA	NA	6.49
North Carolina	6.66	7.49	5.90	6.09	6.45	6.72	7.05	6.99
North Dakota	4.11	3.97	3.85	4.16	4.17	4.13	4.03	4.34
Ohio	5.70	6.40	4.93	5.79	5.62	5.43	5.96	R6.31
Oklahoma	5.33	5.73	4.52	4.57	5.27	5.56	5.53	5.50
Oregon	NA	4.57	4.83	NA	NA	5.17	4.92	4.64
Pennsylvania	NA	7.38	6.10	NA	7.33	7.36	7.14	R7.37
Rhode Island	NA	8.15	7.28	NA	7.88	7.78	7.75	8.21
South Carolina	6.74	7.00	6.37	6.40	6.55	6.91	6.92	6.30
South Dakota	4.28	4.29	3.80	4.69	4.37	4.10	4.12	4.71
Tennessee	NA	NA	5.68	5.68	5.55	6.37	NA	NA
Texas	4.79	5.19	4.22	4.75	4.32	5.37	4.66	5.00
Utah	4.31	3.67	3.32	3.76	4.36	4.35	4.54	3.91
Vermont	5.18	5.18	5.24	5.14	5.10	5.23	5.21	5.18
Virginia	6.10	6.51	5.65	5.63	5.82	6.33	6.41	6.49
Washington	NA	4.61	4.76	NA	NA	NA	NA	NA
West Virginia	6.34	6.18	6.09	6.60	6.32	6.26	6.28	6.42
Wisconsin	5.06	5.58	4.78	4.75	5.24	4.96	5.12	5.41
Wyoming	NA	3.49	3.98	4.60	4.55	4.56	NA	3.93
Total	5.50	5.92	5.30	5.54	5.36	5.54	R5.57	R5.76

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	December	November	October	September	August	July	June	May
Alabama	6.61	6.83	7.46	7.59	7.50	7.60	7.22	6.85
Alaska	2.55	2.53	2.52	2.28	2.09	2.24	2.15	2.23
Arizona	5.56	5.83	5.83	5.82	5.34	5.22	5.21	5.19
Arkansas	5.12	5.45	5.75	5.54	5.18	5.32	5.37	5.14
California	7.04	7.09	6.70	5.88	5.00	5.90	6.32	5.33
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	R7.60	7.88	R6.46	6.59	5.22	5.90	6.35	7.00
Delaware	6.65	6.97	7.56	7.28	8.64	7.91	7.39	6.82
District of Columbia	8.11	8.78	8.08	8.11	7.20	6.92	7.03	6.87
Florida	7.31	7.41	7.13	6.94	6.62	6.98	6.93	6.89
Georgia	5.66	5.46	5.98	6.28	7.00	7.60	7.68	6.30
Hawaii	14.02	14.75	14.75	14.62	15.09	15.07	15.37	15.25
Idaho	4.34	4.66	4.73	4.73	4.83	4.76	4.78	4.66
Illinois	5.24	5.28	5.82	6.24	6.10	5.68	5.55	4.93
Indiana	4.97	4.92	4.93	6.05	6.07	6.50	6.28	6.15
Iowa	5.20	5.53	5.97	7.44	6.44	5.68	6.05	4.88
Kansas	5.71	6.00	5.92	5.66	4.90	4.95	4.90	5.25
Kentucky	5.92	6.03	5.42	5.90	5.95	6.20	6.00	5.53
Louisiana	5.94	7.10	7.30	6.20	5.94	5.39	6.19	6.08
Maine	7.79	7.62	6.84	7.61	7.16	7.12	6.94	6.67
Maryland	6.35	7.11	7.18	6.89	6.22	6.16	6.52	6.05
Massachusetts	8.03	7.74	5.63	5.45	5.53	5.34	5.04	5.44
Michigan	4.79	4.95	5.40	5.97	5.96	5.81	5.44	4.82
Minnesota	4.40	5.26	5.09	4.99	4.41	4.44	4.50	3.99
Mississippi	5.08	5.58	5.98	NA	NA	NA	4.79	5.08
Missouri	6.16	6.01	6.13	5.70	5.19	5.11	4.86	4.39
Montana	5.24	3.81	5.39	4.39	5.73	5.62	5.39	4.81
Nebraska	5.34	5.40	5.26	4.33	3.76	3.56	5.88	5.00
Nevada	5.36	5.47	5.48	5.22	5.22	5.11	5.07	5.12
New Hampshire	7.79	7.83	6.15	6.28	6.47	6.49	6.20	5.86
New Jersey	4.93	5.30	4.91	4.27	4.43	4.32	4.38	5.77
New Mexico	3.59	3.90	4.67	5.12	5.35	5.47	7.67	4.23
New York	6.76	7.01	5.89	5.35	4.78	4.22	4.99	5.84
North Carolina	6.96	6.70	6.18	6.46	6.44	6.44	5.99	6.02
North Dakota	4.92	5.11	4.97	5.15	4.51	4.96	4.54	4.25
Ohio	5.94	6.05	6.22	6.54	6.82	6.76	R7.00	6.08
Oklahoma	5.37	5.32	5.54	5.02	4.94	4.93	5.15	4.97
Oregon	4.67	4.74	4.66	4.82	4.89	4.76	4.79	4.62
Pennsylvania	6.90	6.89	7.26	7.68	R8.05	8.12	8.13	7.99
Rhode Island	7.98	8.02	8.00	8.77	9.12	8.96	8.77	8.07
South Carolina	6.84	6.75	6.10	3.26	6.03	5.90	5.92	5.92
South Dakota	5.06	5.22	5.50	6.51	5.22	5.44	6.09	4.77
Tennessee	6.29	6.12	6.09	6.07	5.81	5.91	NA	5.39
Texas	5.12	5.41	4.76	4.84	4.40	4.51	4.80	4.60
Utah	4.39	4.65	3.78	3.99	4.02	3.82	3.60	3.37
Vermont	5.15	4.99	4.91	5.01	5.43	5.42	5.41	5.58
Virginia	6.53	6.42	6.56	6.60	6.58	6.68	6.10	6.31
Washington	NA	NA	NA	NA	NA	NA	NA	4.83
West Virginia	6.20	6.30	7.01	7.63	8.23	8.53	7.78	6.81
Wisconsin	5.52	6.04	4.88	4.85	4.71	4.30	4.74	3.83
Wyoming	5.56	4.62	5.02	4.43	4.31	4.11	3.93	2.65
Total	R5.70	5.84	5.68	5.54	R5.33	5.28	R5.57	5.36

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997				1996			
	April	March	February	January	Total	December	November	October
Alabama	7.11	7.26	6.92	6.97	6.19	6.52	6.31	6.60
Alaska	2.37	2.53	2.52	[R]2.60	2.32	2.39	2.34	2.23
Arizona	5.09	5.27	5.11	5.01	5.01	4.99	5.02	5.16
Arkansas	4.90	4.86	5.07	5.42	4.68	5.59	5.02	4.72
California	6.10	6.71	6.98	7.18	5.94	6.36	5.49	5.68
Colorado	NA	NA	NA	NA	3.67	3.32	3.41	3.69
Connecticut	7.24	7.66	8.45	8.09	7.41	7.90	7.84	6.19
Delaware	6.61	6.47	6.54	6.33	5.82	6.19	5.96	6.39
District of Columbia	10.06	7.61	7.97	8.24	7.37	8.01	8.02	7.93
Florida	6.74	6.96	6.84	6.56	6.45	6.47	6.43	6.41
Georgia	5.57	7.53	6.66	6.44	5.89	6.33	5.72	6.08
Hawaii	15.34	15.72	15.07	14.72	14.40	15.13	15.31	15.35
Idaho	4.62	4.36	4.29	4.30	4.56	4.34	4.63	4.86
Illinois	4.64	4.97	5.68	5.89	4.92	5.20	4.83	5.23
Indiana	5.97	5.37	5.43	5.14	4.67	4.98	4.66	5.01
Iowa	4.34	4.81	5.32	4.96	4.59	5.16	5.09	5.32
Kansas	5.17	5.46	6.25	6.12	4.61	4.90	4.56	4.69
Kentucky	5.85	5.72	5.80	5.61	5.09	5.67	5.50	5.80
Louisiana	5.08	5.83	6.48	7.08	6.08	6.87	6.58	6.15
Maine	8.28	8.10	8.12	7.75	7.09	7.87	7.58	6.17
Maryland	5.76	6.11	6.72	6.60	6.07	6.61	5.69	5.88
Massachusetts	7.94	8.14	8.28	7.97	6.74	7.91	7.30	4.79
Michigan	4.63	4.71	4.80	4.99	4.75	4.97	4.85	5.24
Minnesota	3.89	4.16	5.23	6.02	4.63	5.66	4.61	3.99
Mississippi	4.93	4.61	5.17	5.61	5.22	5.73	4.86	4.31
Missouri	4.55	5.07	6.47	6.58	5.35	5.83	5.32	5.36
Montana	4.52	4.57	4.45	4.46	4.64	4.49	4.68	5.07
Nebraska	3.91	4.23	5.24	5.91	4.47	5.38	4.03	4.93
Nevada	5.18	4.95	4.86	4.97	4.90	4.88	4.89	5.13
New Hampshire	6.52	8.67	8.81	8.41	6.74	7.75	7.78	5.86
New Jersey	5.57	6.99	7.10	6.73	6.14	6.31	5.71	4.61
New Mexico	4.63	3.54	4.37	5.36	3.35	3.34	3.20	3.48
New York	6.20	6.85	7.53	8.13	6.88	NA	NA	NA
North Carolina	6.50	7.85	7.67	7.52	6.18	6.78	6.67	6.35
North Dakota	3.66	3.65	4.09	4.24	3.91	4.06	3.06	3.15
Ohio	6.18	6.03	6.74	6.45	5.38	5.82	6.15	6.43
Oklahoma	4.81	5.26	5.75	6.40	4.70	5.04	4.80	5.06
Oregon	4.61	4.57	4.55	4.56	4.85	4.65	4.82	5.09
Pennsylvania	7.70	7.37	7.55	7.07	6.44	6.86	6.61	7.00
Rhode Island	8.46	8.17	8.20	7.88	7.50	7.89	7.78	8.23
South Carolina	6.59	7.20	6.87	7.18	6.26	7.01	6.37	5.66
South Dakota	4.04	3.96	4.28	4.61	4.20	4.34	4.20	4.07
Tennessee	5.01	NA	6.19	6.51	5.72	5.78	5.32	5.50
Texas	4.29	4.42	5.28	6.00	4.27	5.38	4.58	4.24
Utah	3.09	3.81	3.75	3.81	3.38	3.69	3.80	2.96
Vermont	5.10	5.15	5.21	5.24	5.24	5.20	5.11	5.11
Virginia	6.29	5.93	6.61	6.97	5.93	6.74	5.94	6.08
Washington	4.21	4.71	4.72	4.65	4.80	4.76	4.79	4.88
West Virginia	6.42	6.22	6.13	6.09	6.03	5.85	6.26	5.82
Wisconsin	5.07	5.03	5.60	6.14	4.83	5.73	4.99	3.72
Wyoming	3.59	3.46	3.53	3.41	3.68	3.08	2.60	3.73
Total	5.45	5.72	6.09	6.15	5.40	5.78	5.40	5.33

[R] = Revised Data.
NA = Not Available.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				1997
				April	March	February	January	Total
Alabama	3.36	3.65	3.83	3.44	3.03	3.50	3.47	3.46
Alaska	1.49	1.55	1.45	1.42	1.45	1.52	1.56	1.54
Arizona	3.51	4.09	3.86	3.45	3.33	3.76	3.53	3.56
Arkansas	3.65	3.73	3.16	3.39	3.78	3.62	3.77	3.70
California	4.23	4.65	3.87	3.97	3.31	5.34	4.55	4.07
Colorado	NA	NA	0.69	NA	NA	2.58	2.69	NA
Connecticut	4.90	5.32	5.46	4.55	4.74	5.13	5.12	4.72
Delaware	4.15	4.51	3.91	4.63	3.79	4.08	4.22	4.32
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.47	4.56	4.31	4.58	4.40	R4.29	R4.59	4.63
Georgia	5.34	5.42	4.48	5.15	5.18	5.37	5.63	5.18
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	3.09	2.76	2.94	3.10	3.25	3.02	3.06	2.73
Illinois	4.12	5.55	3.89	4.02	4.08	4.12	4.22	4.71
Indiana	NA	4.31	3.41	NA	4.56	R4.29	R4.68	4.11
Iowa	1.23	3.97	3.27	0.73	0.64	2.42	3.43	4.12
Kansas	3.69	3.08	3.13	3.56	3.61	3.67	R3.91	3.27
Kentucky	4.20	4.42	3.81	3.85	3.79	4.51	4.59	4.36
Louisiana	2.59	3.08	3.02	2.19	2.89	R2.22	2.90	2.96
Maine	6.02	6.65	6.07	6.02	6.02	6.02	6.02	5.55
Maryland	4.81	NA	5.09	5.10	4.68	4.82	5.42	NA
Massachusetts	6.73	7.33	6.43	6.64	6.77	6.70	6.79	5.97
Michigan	3.86	4.11	3.95	3.81	3.61	4.11	3.90	4.19
Minnesota	3.10	3.41	3.04	3.06	3.08	3.00	3.25	3.26
Mississippi	NA	3.58	3.54	NA	NA	3.22	NA	NA
Missouri	4.70	5.04	4.49	4.30	4.27	4.69	5.30	4.62
Montana	4.93	4.81	4.81	5.22	5.02	4.85	4.82	4.87
Nebraska	3.32	3.92	3.15	3.35	3.34	3.27	3.30	3.74
Nevada	5.95	7.14	4.95	5.84	6.00	6.06	5.90	R7.89
New Hampshire	5.39	6.02	5.12	3.77	5.47	5.84	7.08	4.69
New Jersey	3.45	4.40	4.38	3.42	3.24	3.42	3.71	3.83
New Mexico	3.60	3.41	3.04	4.00	4.09	5.84	2.16	3.12
New York	NA	5.41	5.44	4.49	15.18	NA	NA	4.50
North Carolina	4.30	5.23	4.45	3.63	4.19	4.41	4.95	4.65
North Dakota	3.14	3.13	3.27	3.10	3.22	3.01	3.22	3.23
Ohio	5.40	5.96	4.06	5.21	5.67	5.06	5.62	R5.70
Oklahoma	3.97	4.45	3.04	3.32	4.12	4.18	4.10	4.05
Oregon	NA	3.70	3.19	NA	NA	3.73	3.67	R3.45
Pennsylvania	4.60	5.06	4.36	4.40	4.57	4.55	4.80	4.73
Rhode Island	4.16	4.51	4.99	3.86	4.06	4.25	4.59	4.33
South Carolina	3.51	3.88	4.08	3.42	3.53	3.38	3.67	R3.68
South Dakota	3.32	3.95	2.59	3.37	3.38	3.25	3.30	4.01
Tennessee	NA	NA	3.97	3.64	3.59	3.98	NA	NA
Texas	2.51	2.88	2.47	2.49	2.49	R2.44	2.66	NA
Utah	3.06	2.45	2.14	2.95	3.05	3.19	3.06	2.62
Vermont	2.98	3.13	3.59	2.86	2.94	3.01	3.06	3.07
Virginia	4.39	4.85	4.34	3.45	4.08	4.99	4.81	R4.25
Washington	NA	3.40	2.50	NA	NA	NA	NA	NA
West Virginia	2.83	2.97	2.78	2.97	2.79	2.75	2.81	2.87
Wisconsin	4.13	4.32	3.45	4.20	4.17	4.48	3.79	4.12
Wyoming	NA	3.40	3.09	NA	NA	NA	NA	3.39
Total	3.46	3.85	3.54	3.22	3.41	R3.52	R3.68	R3.54

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	December	November	October	September	August	July	June	May
Alabama	3.57	3.62	3.66	3.21	3.21	3.08	3.20	3.19
Alaska	1.56	1.55	1.54	1.57	1.56	1.56	1.48	1.44
Arizona	3.37	3.20	3.68	3.26	3.10	3.16	3.90	3.90
Arkansas	3.98	4.28	3.87	3.58	3.57	3.42	3.37	3.17
California	4.45	4.63	4.28	3.50	3.42	3.79	4.00	2.51
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	4.81	4.96	4.29	4.07	3.86	3.93	4.02	4.22
Delaware	4.60	4.69	4.55	4.06	4.07	4.04	3.99	3.62
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.94	5.21	5.02	4.79	4.64	4.32	4.40	4.34
Georgia	4.61	5.04	4.80	6.43	4.68	4.81	6.14	4.67
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	2.77	2.74	2.72	2.69	2.68	2.80	2.52	2.73
Illinois	4.92	5.69	4.57	3.83	4.48	4.15	3.16	3.00
Indiana	4.28	3.48	3.57	4.07	3.95	3.91	4.38	4.50
Iowa	4.56	4.55	4.42	3.90	3.52	4.11	3.37	3.96
Kansas	5.41	4.18	4.33	3.44	3.10	3.01	3.03	2.57
Kentucky	5.01	5.39	4.35	3.99	3.87	3.90	3.61	3.73
Louisiana	3.12	3.52	3.54	2.86	2.49	2.76	2.71	2.39
Maine	7.19	5.88	4.68	4.65	4.43	4.40	4.45	4.10
Maryland	5.49	5.32	4.36	4.87	4.49	5.38	4.67	4.71
Massachusetts	7.02	6.63	4.54	4.19	4.02	4.19	3.73	4.63
Michigan	4.19	4.24	4.51	4.16	4.53	4.60	4.41	4.24
Minnesota	3.24	3.86	3.80	3.06	2.74	2.74	2.72	2.67
Mississippi	3.53	4.04	3.86	NA	NA	NA	3.21	3.06
Missouri	5.36	5.04	4.35	3.89	3.88	3.81	3.81	3.45
Montana	4.93	4.88	4.99	4.98	4.98	4.96	4.88	4.85
Nebraska	3.97	4.32	4.15	3.48	3.38	3.09	3.02	2.77
Nevada	8.10	9.69	11.58	9.23	7.42	7.08	7.50	7.77
New Hampshire	7.42	6.53	4.54	3.47	3.46	3.42	3.62	3.12
New Jersey	4.33	4.41	3.79	3.31	2.72	3.35	3.32	3.09
New Mexico	2.38	2.96	3.56	3.24	3.02	2.92	3.71	2.96
New York	5.42	5.48	4.95	3.88	4.20	1.56	4.32	4.49
North Carolina	5.10	5.05	4.13	4.30	2.83	4.00	3.64	4.01
North Dakota	3.43	3.85	4.07	3.35	3.66	3.14	3.02	2.42
Ohio	5.60	5.54	4.99	5.55	5.38	4.42	[R]6.70	4.50
Oklahoma	4.26	4.37	4.10	3.44	3.33	3.34	3.32	2.75
Oregon	[R]3.91	[R]3.65	3.04	3.03	2.96	3.15	3.10	3.15
Pennsylvania	4.56	4.59	4.46	4.21	4.14	4.59	4.70	4.48
Rhode Island	5.04	4.59	4.28	4.08	3.66	3.78	3.74	4.72
South Carolina	3.95	4.26	3.97	3.23	3.25	[R]3.40	3.32	3.26
South Dakota	3.71	4.36	4.64	4.16	3.96	4.49	4.08	3.55
Tennessee	4.47	4.17	4.16	3.89	3.44	3.09	NA	3.19
Texas	2.80	3.51	3.29	NA	2.34	2.41	2.46	2.31
Utah	3.11	2.98	2.81	2.61	2.81	2.70	2.27	2.27
Vermont	3.11	3.12	2.97	3.00	2.96	2.97	3.01	3.05
Virginia	4.27	3.97	3.44	3.98	3.95	3.82	3.88	4.03
Washington	NA	NA	NA	NA	NA	NA	NA	2.94
West Virginia	2.75	2.68	2.89	2.93	2.84	2.91	2.72	2.81
Wisconsin	4.53	5.05	4.19	3.54	3.24	3.20	3.28	2.98
Wyoming	3.55	3.55	3.32	3.32	3.34	3.38	3.35	3.24
Total	[R]3.79	4.07	3.66	3.21	2.92	[R]3.01	3.07	2.92

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997				1996			
	April	March	February	January	Total	December	November	October
Alabama	2.96	3.15	3.91	4.57	3.64	4.61	3.72	3.14
Alaska	1.53	1.55	1.57	1.55	1.41	1.35	1.35	1.35
Arizona	4.31	4.06	3.74	4.32	3.80	3.81	3.80	3.78
Arkansas	3.19	3.31	3.78	4.45	3.28	4.33	3.72	3.00
California	3.45	4.24	5.32	5.49	3.77	4.40	4.01	3.32
Colorado	NA	NA	NA	NA	2.91	1.01	0.94	2.13
Connecticut	4.46	4.91	5.76	6.11	4.80	5.81	4.95	4.00
Delaware	3.62	4.35	5.03	5.29	4.32	5.00	4.62	4.62
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.41	4.42	4.68	4.69	4.21	4.52	4.29	3.96
Georgia	4.39	5.07	5.63	6.40	4.40	4.87	3.76	4.16
Hawaii	—	—	—	—	—	—	—	—
Idaho [a]	2.75	2.75	2.76	2.78	2.78	2.42	2.51	2.76
Illinois	4.10	4.80	5.86	6.49	4.12	4.15	4.09	4.17
Indiana	4.67	4.41	4.21	4.19	3.62	4.16	3.52	3.52
Iowa	3.14	4.04	4.73	3.94	3.63	3.96	3.82	3.46
Kansas	2.32	2.34	3.45	4.33	3.09	4.85	3.37	2.44
Kentucky	3.82	3.97	4.67	4.78	3.87	4.64	3.92	3.73
Louisiana	2.34	2.09	3.49	4.19	2.84	4.07	3.05	2.22
Maine	5.77	7.08	7.10	6.95	5.22	6.60	6.56	4.04
Maryland	20.15	5.67	NA	5.31	5.36	4.63	6.00	7.80
Massachusetts	6.35	7.12	8.35	7.49	5.37	6.98	5.52	4.15
Michigan	4.12	4.15	4.02	4.16	3.87	4.06	3.97	3.74
Minnesota	2.58	2.74	3.73	4.66	2.97	4.18	3.09	2.12
Mississippi	2.98	2.93	3.80	4.45	3.43	4.47	3.59	2.87
Missouri	3.78	4.48	5.94	5.35	4.35	4.84	4.02	3.75
Montana	4.84	4.84	4.80	4.79	4.88	4.87	4.95	5.02
Nebraska	2.66	3.19	4.14	5.16	3.29	4.30	3.62	2.71
Nevada	5.80	4.67	[R]8.34	9.50	4.90	4.67	4.68	5.01
New Hampshire	4.02	6.10	7.97	7.94	4.79	6.84	5.13	7.64
New Jersey	2.87	4.82	5.03	4.92	3.82	4.62	3.70	3.05
New Mexico	5.10	3.40	4.02	3.01	2.90	2.63	2.78	2.98
New York	4.58	5.22	5.72	5.93	5.04	5.17	4.79	4.45
North Carolina	4.14	4.80	5.41	5.63	4.37	5.14	4.65	4.05
North Dakota	2.37	1.60	4.94	4.39	3.02	3.89	2.36	2.28
Ohio	5.96	5.49	6.71	5.77	4.10	2.79	5.14	4.84
Oklahoma	3.08	3.90	4.53	5.41	3.26	3.87	3.33	3.28
Oregon	[R]3.57	[R]3.68	[R]3.80	[R]3.73	3.24	3.29	3.36	3.52
Pennsylvania	4.73	4.91	5.25	5.25	4.12	3.87	4.15	3.97
Rhode Island	3.56	4.50	5.52	5.64	4.67	9.64	4.62	3.70
South Carolina	3.21	3.43	4.22	4.74	3.77	4.58	4.03	3.29
South Dakota	3.12	3.00	4.00	4.99	3.50	6.16	4.81	4.73
Tennessee	3.40	NA	4.75	4.80	3.92	4.52	3.95	3.52
Texas	2.03	2.08	3.19	4.10	2.58	3.82	2.89	2.06
Utah	2.31	2.53	2.53	2.44	2.10	2.28	2.22	1.97
Vermont	2.98	3.10	3.14	3.32	3.44	3.18	3.20	3.44
Virginia	3.11	4.79	5.51	[R]6.33	4.07	3.91	3.53	4.14
Washington	2.75	2.88	3.58	4.36	2.67	3.81	2.78	2.52
West Virginia	2.49	2.78	3.03	3.44	2.76	2.96	3.06	2.70
Wisconsin	3.89	3.55	4.41	5.06	3.48	4.79	4.10	2.67
Wyoming	3.40	3.40	3.41	3.40	3.14	3.25	3.32	3.29
Total	[R]3.00	3.36	[R]4.21	[R]4.64	3.42	4.20	3.57	2.89

[R] = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 24 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998			1997	
				March	February	January	Total	December
Alabama	2.66	2.72	3.23	2.55	2.44	2.86	2.76	2.90
Alaska	1.86	1.63	1.30	1.85	1.88	1.85	1.74	1.84
Arizona	2.82	3.90	2.71	3.07	2.56	2.84	2.99	2.86
Arkansas	2.32	3.14	3.63	2.36	2.16	2.25	2.60	2.24
California	2.87	3.83	2.86	2.85	2.79	2.94	3.07	2.96
Colorado	2.75	3.15	1.81	2.61	2.65	3.01	3.21	2.93
Connecticut	2.73	2.90	—	2.79	2.63	2.74	2.55	2.74
Delaware	4.44	3.36	4.06	4.15	3.21	5.34	3.15	4.28
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.45	3.45	3.43	2.64	2.49	2.25	3.20	3.19
Georgia	2.10	3.71	5.37	1.72	2.88	2.35	2.76	4.97
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.29	2.59	3.17	2.34	2.28	2.25	2.54	2.48
Indiana	3.23	3.72	3.71	3.25	2.64	3.84	3.27	3.67
Iowa	3.25	3.68	4.32	3.35	3.00	3.36	3.27	2.99
Kansas	2.55	3.10	2.30	2.36	1.97	3.35	2.48	3.33
Kentucky	3.82	3.89	3.82	4.04	3.58	3.46	3.34	3.47
Louisiana	2.54	3.11	3.66	2.51	2.47	2.61	2.80	2.86
Maine	—	—	—	—	—	—	—	—
Maryland	3.36	4.59	6.01	3.18	3.32	3.75	2.97	3.61
Massachusetts	3.25	3.27	4.56	3.64	2.95	3.16	3.11	3.57
Michigan	0.69	0.62	0.78	0.75	0.84	0.51	0.79	0.47
Minnesota	2.72	2.31	2.26	2.83	2.62	2.63	2.54	2.99
Mississippi	2.47	2.99	5.04	2.46	2.46	2.48	2.75	2.80
Missouri	2.62	4.09	3.19	2.52	2.82	2.63	2.67	2.77
Montana	12.18	5.17	8.77	12.33	8.49	4.61	7.62	4.18
Nebraska	3.04	2.81	2.19	2.72	4.47	2.72	2.58	4.94
Nevada	2.28	2.13	2.11	2.02	2.37	2.41	2.17	2.16
New Hampshire	—	—	—	—	—	—	2.71	—
New Jersey	2.89	3.24	2.90	2.88	2.83	2.98	3.07	3.20
New Mexico	2.38	2.88	2.16	2.39	2.30	2.43	2.64	2.55
New York	2.98	3.14	3.99	2.96	2.95	3.00	2.89	3.38
North Carolina	3.92	6.89	3.07	4.03	—	3.02	3.16	3.60
North Dakota	—	2.93	3.58	—	—	—	3.81	—
Ohio	3.78	3.99	3.80	4.14	3.16	3.32	3.66	4.13
Oklahoma	3.21	3.75	3.50	2.62	2.72	4.47	2.97	2.89
Oregon	1.14	1.73	—	1.23	1.03	1.14	1.48	1.48
Pennsylvania	2.70	3.37	4.40	2.69	2.64	2.79	2.86	3.16
Rhode Island	3.33	3.38	2.39	3.19	3.24	3.48	3.39	3.78
South Carolina	3.68	4.71	4.50	3.58	3.53	4.05	4.15	4.46
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	1.20	—	—	—	—	—
Texas	2.44	2.95	2.47	2.43	2.41	2.49	2.70	2.74
Utah	—	—	20.25	—	—	—	2.11	—
Vermont	2.91	3.57	3.06	2.81	2.77	3.02	3.27	3.42
Virginia	3.33	2.78	2.41	3.34	3.78	3.05	2.99	2.54
Washington	2.10	7.58	5.17	3.86	4.11	1.64	5.54	5.73
West Virginia	5.59	5.21	3.93	—	—	5.59	3.87	3.31
Wisconsin	2.81	3.26	3.22	2.75	2.91	2.90	3.04	2.92
Wyoming	8.62	12.45	15.63	10.42	8.72	5.39	9.31	1.63
Total	2.57	3.13	2.88	2.54	2.51	2.64	2.81	2.85

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	November	October	September	August	July	June	May	April
Alabama	3.70	3.75	2.88	2.56	2.51	2.65	2.44	3.21
Alaska	1.84	1.85	1.88	1.69	1.87	1.79	1.64	1.63
Arizona	4.00	3.11	3.37	2.63	2.20	3.03	3.11	4.47
Arkansas	3.12	3.12	2.89	2.64	2.38	2.40	1.92	1.98
California	3.64	3.40	3.14	2.81	2.69	2.75	2.60	2.63
Colorado	3.90	2.37	2.42	2.77	4.07	2.31	6.20	2.47
Connecticut	3.38	2.76	2.37	2.35	2.33	2.26	2.22	2.22
Delaware	2.58	5.69	3.40	3.00	2.83	1.95	3.68	2.53
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.06	4.05	3.41	2.97	2.94	3.03	2.87	2.58
Georgia	3.33	3.94	3.07	2.27	2.75	3.13	2.64	2.64
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	3.31	3.13	2.82	2.39	2.31	2.37	2.29	2.12
Indiana	4.03	5.25	3.67	3.39	2.77	2.99	3.06	2.88
Iowa	4.16	3.81	3.28	3.12	2.70	3.28	2.89	2.79
Kansas	3.02	3.05	2.70	2.13	2.06	2.11	2.14	2.00
Kentucky	4.24	4.00	3.25	2.92	2.87	2.96	2.83	3.13
Louisiana	3.61	3.40	3.03	2.60	2.44	2.65	2.45	2.18
Maine	—	—	—	—	—	—	—	—
Maryland	4.10	3.91	3.42	2.89	2.35	2.69	2.98	3.14
Massachusetts	4.08	4.08	3.21	2.87	2.81	2.92	2.84	2.54
Michigan	1.08	1.59	0.73	0.58	0.96	0.84	0.42	0.61
Minnesota	3.72	3.67	3.56	2.43	2.43	2.34	2.30	2.34
Mississippi	3.51	3.35	3.02	2.61	2.46	2.52	2.37	2.27
Missouri	3.52	3.35	2.94	2.51	2.39	2.44	2.74	2.77
Montana	6.84	2.98	64.31	1.92	1.37	9.35	13.57	2.87
Nebraska	4.29	3.21	2.98	2.49	2.32	2.00	1.89	1.89
Nevada	2.80	2.64	2.39	2.02	1.98	2.09	1.99	2.02
New Hampshire	—	—	2.85	2.55	2.74	2.72	2.68	—
New Jersey	4.19	4.23	3.42	2.87	2.80	2.85	2.76	2.69
New Mexico	3.02	3.05	2.82	2.47	2.46	2.38	2.39	2.07
New York	3.83	3.39	2.89	2.60	2.58	2.65	2.62	2.53
North Carolina	4.95	3.68	3.38	3.09	3.12	2.87	2.64	2.79
North Dakota	—	—	—	—	4.00	—	4.14	3.98
Ohio	4.12	4.00	4.35	4.28	3.10	3.20	4.13	4.06
Oklahoma	4.05	3.46	3.20	2.48	2.37	2.63	2.91	2.57
Oregon	1.44	1.45	1.49	1.49	1.35	1.57	—	—
Pennsylvania	3.69	3.65	2.99	2.81	2.54	3.04	2.57	2.31
Rhode Island	4.05	4.02	3.32	3.04	2.98	3.21	3.09	2.82
South Carolina	4.00	4.10	4.54	4.54	4.35	3.51	3.84	3.87
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	3.33	3.15	2.85	2.50	2.39	2.46	2.34	2.14
Utah	—	2.00	2.66	1.79	1.86	4.82	—	—
Vermont	4.21	3.96	—	2.90	2.95	—	2.83	2.27
Virginia	4.09	4.73	3.77	2.95	2.58	2.93	3.05	2.71
Washington	5.16	4.21	8.62	0.67	4.83	3.83	7.21	5.93
West Virginia	3.00	3.29	3.41	3.71	3.79	3.23	3.22	3.63
Wisconsin	4.11	3.94	3.09	2.85	3.12	2.81	2.58	2.46
Wyoming	3.43	4.88	7.74	34.13	20.44	4.00	11.82	24.02
Total	3.48	3.30	2.99	2.58	2.49	2.59	2.51	2.34

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility[a] Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997			1996				
	March	February	January	Total	December	November	October	September
Alabama	2.12	2.04	4.37	2.95	4.32	3.16	2.27	2.14
Alaska	1.55	1.69	1.68	1.45	1.64	1.63	1.73	1.71
Arizona	2.85	4.01	5.70	3.03	7.53	4.76	2.53	2.98
Arkansas	1.60	1.92	4.18	2.52	3.88	2.62	1.36	1.89
California	3.04	4.14	4.67	2.75	4.55	3.40	2.60	2.51
Colorado	2.26	3.32	3.76	2.09	4.30	2.93	2.47	1.54
Connecticut	2.45	3.08	3.97	2.76	4.97	3.26	2.78	2.30
Delaware	2.61	2.90	4.87	3.13	4.06	3.65	2.32	2.32
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.62	3.80	5.18	3.12	4.75	3.38	2.56	2.59
Georgia	3.34	8.15	2.08	2.88	6.28	2.50	3.08	2.72
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.00	2.93	3.34	2.62	3.82	3.10	2.12	1.98
Indiana	2.74	3.74	5.04	3.48	4.80	3.86	3.38	2.99
Iowa	2.73	3.74	5.11	3.23	3.77	3.45	2.95	1.80
Kansas	1.80	2.92	4.56	2.25	4.10	2.62	1.88	1.81
Kentucky	3.20	3.69	4.85	3.49	4.64	3.51	2.82	2.59
Louisiana	2.10	2.93	4.35	2.94	4.37	3.12	2.25	2.16
Maine	—	—	—	—	—	—	—	—
Maryland	4.18	5.75	5.04	3.11	5.92	4.02	2.65	2.85
Massachusetts	2.64	3.29	5.37	3.07	4.85	3.85	2.69	2.33
Michigan	0.69	0.59	0.56	0.74	0.55	0.73	0.55	0.59
Minnesota	2.17	3.35	2.26	2.18	2.32	2.19	2.14	2.14
Mississippi	2.08	2.61	4.15	2.78	4.27	3.23	2.10	2.00
Missouri	2.26	4.62	5.41	2.58	4.90	2.61	2.38	2.24
Montana	4.08	9.68	3.54	2.89	1.81	1.66	0.65	6.59
Nebraska	2.29	3.20	3.22	2.07	4.37	2.85	1.85	1.81
Nevada	2.05	2.33	2.14	2.12	2.19	2.37	2.71	1.96
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.57	3.60	4.65	2.96	4.39	3.16	2.36	2.42
New Mexico	2.01	2.85	4.07	2.31	3.80	2.94	2.17	1.94
New York	2.56	3.35	4.36	2.96	4.22	3.39	2.37	2.26
North Carolina	—	—	6.89	3.11	4.41	4.20	2.55	2.80
North Dakota	2.93	—	—	2.93	2.81	3.92	2.94	—
Ohio	4.03	4.16	3.87	3.44	4.27	3.92	2.96	2.80
Oklahoma	2.88	4.36	4.21	2.98	4.43	3.61	2.93	2.38
Oregon	1.40	—	1.96	1.33	2.01	1.42	1.42	1.27
Pennsylvania	2.72	2.91	4.65	2.85	4.57	3.31	2.70	1.67
Rhode Island	2.90	4.09	3.18	2.29	3.14	2.34	1.81	1.78
South Carolina	2.84	4.22	6.95	4.56	5.08	4.47	5.32	4.01
South Dakota	—	—	—	2.36	—	—	—	—
Tennessee	—	—	—	2.61	—	1.20	—	—
Texas	2.12	2.85	3.89	2.51	3.80	2.82	2.23	2.10
Utah	—	—	—	1.83	—	—	—	1.50
Vermont	2.61	3.60	5.05	3.22	4.42	3.37	2.68	2.70
Virginia	2.76	1.80	3.13	2.98	3.42	2.04	3.77	2.93
Washington	65.04	4.50	5.11	4.98	4.75	5.03	4.35	4.01
West Virginia	3.82	7.68	3.15	2.99	2.94	2.87	3.69	—
Wisconsin	2.33	3.42	4.74	3.04	4.29	3.48	2.55	2.38
Wyoming	22.85	2.47	13.99	12.59	26.41	17.57	17.64	3.19
Total	2.39	3.18	4.08	2.69	3.98	3.04	2.37	2.24

[a] Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

— = Not Applicable.

Notes: Data for 1996 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998

State	YTD 1998		YTD 1997		YTD 1996		1998	
							April	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	78.0	17.4	74.9	18.1	85.4	25.0	77.4	14.8
Alaska	58.9	100.0	58.5	98.1	73.3	63.9	57.4	100.0
Arizona	86.5	31.7	86.6	20.2	87.9	21.6	84.9	32.7
Arkansas	94.3	10.1	95.6	12.3	96.4	14.7	89.5	9.1
California	58.3	11.5	55.9	11.1	61.6	11.2	52.7	10.9
Colorado	NA	NA	NA	NA	94.4	16.4	NA	NA
Connecticut	73.3	58.9	88.8	71.5	92.6	95.7	62.3	61.9
Delaware	100.0	26.6	100.0	32.8	100.0	51.0	100.0	23.3
District of Columbia	58.2	—	67.6	—	82.8	—	52.5	—
Florida	96.4	4.2	96.8	7.6	97.0	15.3	96.8	4.5
Georgia	88.3	15.9	91.4	18.1	97.2	40.2	85.5	13.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	88.6	2.4	88.1	2.1	88.7	1.3	86.4	2.2
Illinois	51.7	10.1	56.8	10.9	56.7	18.0	44.3	9.1
Indiana	NA	NA	90.0	16.0	98.1	24.2	NA	NA
Iowa	82.4	14.6	89.7	7.9	89.6	8.7	82.8	19.9
Kansas	73.3	5.3	70.2	10.1	79.7	7.5	69.5	5.6
Kentucky	88.4	14.1	90.6	18.3	92.4	37.4	85.7	14.7
Louisiana	68.3	7.1	98.2	9.1	98.2	10.1	98.1	7.2
Maine	100.0	97.9	100.0	95.3	100.0	93.4	100.0	97.9
Maryland	55.0	2.8	81.4	9.6	94.7	20.5	42.9	1.6
Massachusetts	63.0	18.3	69.1	22.1	82.9	31.7	60.0	27.5
Michigan	65.0	9.1	67.9	9.4	72.2	13.0	58.3	9.6
Minnesota	94.0	42.4	98.6	41.6	97.4	43.1	96.1	38.9
Mississippi	NA	NA	95.8	36.9	97.7	42.9	NA	NA
Missouri	84.2	21.8	82.9	22.3	87.3	27.8	82.0	17.4
Montana	84.3	3.7	91.4	4.3	92.7	4.6	79.4	2.2
Nebraska	77.3	25.0	77.9	22.4	79.9	23.2	71.5	21.3
Nevada	76.7	2.2	76.5	2.3	78.7	2.1	73.2	5.8
New Hampshire	96.3	38.3	96.4	54.1	98.2	57.3	96.2	47.0
New Jersey	60.3	47.7	73.3	50.2	79.0	59.0	55.2	29.2
New Mexico	66.5	7.5	70.4	10.1	64.5	1.4	58.2	6.3
New York	NA	NA	64.2	7.0	NA	12.6	58.1	10.1
North Carolina	92.3	28.1	95.0	44.2	99.8	85.4	90.6	31.2
North Dakota	85.9	31.9	92.8	49.6	90.9	22.3	80.0	25.3
Ohio	59.3	3.8	69.4	5.9	75.9	10.3	53.9	2.7
Oklahoma	79.8	5.4	89.4	6.5	88.7	9.0	75.0	4.9
Oregon	NA	NA	98.8	20.6	98.5	25.5	NA	NA
Pennsylvania	NA	14.8	67.4	15.8	76.7	22.9	NA	13.3
Rhode Island	NA	14.5	87.9	18.7	99.1	20.9	NA	41.2
South Carolina	98.3	85.5	98.0	80.6	100.0	86.9	98.4	86.0
South Dakota	87.2	45.2	86.2	28.2	87.2	39.3	93.7	56.2
Tennessee	NA	NA	NA	NA	96.7	54.2	75.8	29.3
Texas	65.8	14.4	65.6	18.4	85.8	20.6	59.8	14.5
Utah	85.0	8.2	85.4	9.2	84.0	9.5	82.5	7.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	74.2	15.7	80.5	13.2	92.5	21.1	70.9	11.2
Washington	NA	NA	86.3	26.9	88.1	31.2	NA	NA
West Virginia	43.7	7.1	62.9	12.5	61.8	16.4	50.3	5.8
Wisconsin	79.9	23.4	87.0	33.7	93.8	44.9	72.9	19.3
Wyoming	NA	NA	76.1	1.8	94.5	3.1	91.3	NA
Total	70.7	15.5	75.2	17.9	82.2	21.9	67.0	15.0

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998						1997	
	March		February		January		Total	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	77.8	17.4	80.1	17.8	76.7	19.4	R56.8	R18.4
Alaska	57.6	100.0	60.0	100.0	59.9	100.0	R54.3	R97.8
Arizona	86.7	34.0	87.2	27.7	86.9	32.3	R84.5	R25.8
Arkansas	93.9	10.2	95.3	10.9	95.5	10.5	R93.9	R10.6
California	71.1	16.5	54.3	8.7	58.1	11.0	R50.2	R9.8
Colorado	NA	NA	NA	1.6	NA	3.4	NA	NA
Connecticut	71.2	59.4	78.2	57.8	78.4	61.0	R82.7	R65.4
Delaware	100.0	27.9	100.0	28.6	100.0	26.4	R100.0	R29.7
District of Columbia	60.1	—	59.0	—	60.2	—	R58.5	—
Florida	96.2	4.4	96.3	R4.0	96.3	R4.5	R96.6	R6.6
Georgia	87.5	17.2	90.3	16.7	88.7	16.5	R88.0	R16.9
Hawaii	100.0	—	100.0	—	100.0	—	R100.0	—
Idaho	88.1	2.0	88.7	3.0	90.0	2.5	R86.1	R2.2
Illinois	55.3	10.6	50.4	9.8	53.7	10.7	R53.3	R9.9
Indiana	88.6	12.3	84.6	11.1	R85.7	R11.2	R79.7	R13.3
Iowa	72.1	22.8	88.7	7.1	87.4	7.4	R87.2	R7.7
Kansas	76.9	5.5	73.1	5.3	71.5	R5.1	R62.2	R7.7
Kentucky	90.0	13.1	86.5	17.2	90.0	12.3	R89.3	R15.5
Louisiana	58.2	9.8	60.9	R6.0	74.1	5.4	R98.3	R8.1
Maine	100.0	97.9	100.0	97.9	100.0	97.9	R100.0	R91.4
Maryland	50.9	5.1	54.7	3.7	65.6	0.7	R64.5	R6.1
Massachusetts	65.5	29.0	R61.4	32.5	64.3	30.3	R60.4	R18.7
Michigan	64.3	12.1	65.2	12.6	69.5	13.5	R62.8	R6.4
Minnesota	96.2	48.8	93.3	37.4	91.9	45.0	R98.5	R39.7
Mississippi	NA	NA	94.8	38.5	NA	NA	NA	NA
Missouri	83.3	21.5	85.4	24.0	85.2	23.7	R79.9	R21.3
Montana	83.1	3.5	83.1	4.3	88.3	4.7	R90.8	R3.1
Nebraska	77.3	24.0	78.0	23.2	79.9	30.1	R70.4	R21.5
Nevada	75.9	7.1	79.8	15.3	77.3	7.2	R71.3	R1.9
New Hampshire	96.1	39.1	96.2	37.2	96.4	30.4	R93.4	R52.3
New Jersey	62.4	29.5	62.1	34.6	59.4	31.7	R66.1	R48.8
New Mexico	67.3	1.5	64.4	1.8	71.5	8.3	R66.9	R14.2
New York	NA	10.1	NA	NA	NA	NA	R57.5	R6.3
North Carolina	91.1	26.6	93.1	27.3	93.4	27.6	R94.1	R40.4
North Dakota	87.0	32.1	84.9	33.3	89.1	36.1	R88.2	R38.9
Ohio	60.1	3.2	60.2	4.7	60.5	4.5	R64.6	R3.9
Oklahoma	77.7	5.2	83.2	5.2	81.1	6.3	R85.1	R4.6
Oregon	NA	NA	99.2	15.3	99.3	19.7	R98.5	R16.5
Pennsylvania	57.7	14.2	57.2	15.2	58.7	16.3	R61.9	R13.8
Rhode Island	64.7	49.9	71.6	38.5	64.5	39.7	R80.5	R17.4
South Carolina	98.2	84.9	98.4	85.4	98.1	85.8	R98.0	R84.1
South Dakota	85.6	37.9	85.7	45.9	86.5	45.2	R83.3	R24.0
Tennessee	93.1	28.1	87.8	25.5	NA	NA	NA	NA
Texas	61.3	R15.2	R71.6	R15.5	68.3	R12.3	R60.4	NA
Utah	81.2	8.6	89.1	8.5	85.7	7.8	R83.2	R9.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	R100.0	R100.0
Virginia	73.4	19.2	76.7	14.6	74.4	18.7	R76.9	R11.8
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	51.9	6.2	29.9	14.9	56.0	6.3	R51.3	R12.1
Wisconsin	77.6	23.4	80.3	23.8	85.4	26.0	R80.8	R28.5
Wyoming	87.4	NA	80.3	NA	NA	NA	R73.4	R1.9
Total	71.6	R16.5	R70.5	R15.3	R72.3	R15.0	R69.4	R16.1

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	December		November		October		September	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	75.3	21.8	61.7	20.2	42.8	18.2	33.1	17.6
Alaska	R54.1	100.0	R51.7	100.0	R52.1	100.0	R49.7	100.0
Arizona	85.2	33.8	83.2	32.0	81.1	31.0	83.9	30.3
Arkansas	95.7	10.5	89.9	11.2	92.2	10.0	90.9	8.7
California	54.4	9.9	49.1	7.9	41.6	6.1	40.9	9.9
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	76.9	62.9	83.1	55.7	R68.5	66.5	74.9	65.5
Delaware	100.0	25.8	100.0	26.3	100.0	29.0	100.0	25.7
District of Columbia	60.8	—	60.4	—	44.5	—	35.5	—
Florida	94.7	5.7	95.2	5.5	96.7	6.0	96.9	6.1
Georgia	90.6	22.7	87.3	18.3	84.5	20.6	81.6	9.1
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	86.6	2.0	83.2	1.9	76.4	1.6	82.5	1.7
Illinois	51.1	10.7	51.5	8.2	49.1	7.1	46.7	10.4
Indiana	85.7	14.2	91.5	19.2	87.4	12.2	75.4	8.4
Iowa	88.8	8.4	84.3	12.0	79.4	10.3	77.2	5.9
Kansas	55.9	4.3	56.7	5.5	66.3	5.5	50.3	6.1
Kentucky	90.6	14.2	89.2	14.4	89.3	14.9	83.9	13.0
Louisiana	98.0	6.3	97.4	7.4	98.4	7.0	98.1	7.1
Maine	100.0	89.7	100.0	92.2	100.0	89.4	100.0	87.8
Maryland	61.1	0.9	37.4	41.7	50.5	5.5	49.0	2.0
Massachusetts	66.2	31.6	60.0	32.2	46.0	25.9	41.4	28.0
Michigan	64.7	11.8	63.9	9.3	53.3	4.2	38.8	3.1
Minnesota	98.4	40.0	99.1	42.0	98.6	38.0	97.7	41.5
Mississippi	94.4	38.3	93.3	35.4	89.5	37.5	NA	NA
Missouri	82.7	22.9	78.3	19.9	68.6	19.6	68.4	22.5
Montana	92.7	3.8	90.4	2.8	87.9	2.3	85.5	1.9
Nebraska	74.1	20.4	68.9	34.2	46.6	17.4	59.0	21.0
Nevada	72.6	6.9	67.9	5.9	65.9	5.5	62.9	4.6
New Hampshire	94.0	32.4	89.1	34.2	85.7	44.2	86.9	48.4
New Jersey	62.6	32.9	58.9	32.2	57.7	27.7	58.1	28.1
New Mexico	75.5	16.3	70.9	14.1	57.2	9.5	52.9	14.6
New York	59.8	8.3	56.6	7.7	49.3	8.1	49.8	6.2
North Carolina	95.5	30.7	99.4	78.1	98.2	68.8	86.4	21.2
North Dakota	84.8	37.3	90.8	35.6	84.0	26.1	74.7	19.4
Ohio	66.3	5.1	66.5	4.2	54.1	1.8	49.5	1.5
Oklahoma	85.5	5.4	78.5	4.3	75.7	3.1	75.5	3.2
Oregon	98.4	R16.0	98.4	R14.5	97.5	14.5	98.0	13.2
Pennsylvania	62.4	12.3	61.9	13.9	48.6	12.7	54.6	12.1
Rhode Island	64.0	36.0	80.7	41.2	71.1	39.9	68.7	33.6
South Carolina	97.6	81.5	100.0	86.6	99.9	87.5	98.5	84.8
South Dakota	86.1	34.2	84.0	37.5	68.3	17.8	59.9	14.0
Tennessee	90.8	24.2	92.5	38.9	86.4	26.8	82.4	18.2
Texas	66.3	12.9	61.5	12.1	59.4	13.9	47.0	NA
Utah	86.1	8.5	83.1	9.8	80.2	9.2	74.8	12.0
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	76.7	14.4	88.7	21.2	68.1	13.5	67.6	7.4
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	55.6	11.1	50.3	13.8	35.6	13.2	29.8	11.8
Wisconsin	82.1	27.9	84.7	28.9	67.9	25.7	60.9	22.8
Wyoming	92.7	1.9	79.4	1.3	79.7	2.0	79.2	2.7
Total	R72.0	15.1	67.5	16.1	R61.8	15.2	R58.0	13.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	August		July		June		May	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	25.1	17.4	22.8	17.3	49.5	17.2	55.5	18.0
Alaska	R44.8	92.8	R49.7	91.4	R50.3	99.0	R54.6	99.0
Arizona	78.7	30.1	79.7	31.3	82.7	18.7	86.1	18.1
Arkansas	91.4	7.9	89.9	9.3	90.7	10.2	91.4	11.3
California	41.5	7.7	45.6	7.8	48.2	8.9	49.5	13.0
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	80.1	62.1	72.8	63.5	77.1	63.7	79.7	65.6
Delaware	100.0	27.5	100.0	27.5	100.0	28.2	100.0	34.4
District of Columbia	38.8	—	43.9	—	46.7	—	53.7	—
Florida	97.3	6.9	96.9	6.3	97.6	7.5	97.7	6.9
Georgia	80.1	15.7	79.1	17.4	82.7	13.4	83.9	12.9
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	82.9	1.4	83.2	5.2	83.3	2.3	86.5	2.5
Illinois	39.4	5.3	45.8	3.4	54.8	14.7	47.4	13.8
Indiana	74.7	7.8	72.4	9.0	39.6	9.2	38.3	9.6
Iowa	84.5	6.5	75.0	5.3	90.1	5.1	83.2	5.4
Kansas	44.9	6.7	46.8	5.1	56.1	4.6	58.3	13.1
Kentucky	79.1	11.5	82.9	12.4	87.7	14.1	85.3	15.7
Louisiana	99.2	8.0	98.8	7.9	98.6	8.3	98.5	9.0
Maine	100.0	88.6	100.0	100.0	100.0	88.5	100.0	91.2
Maryland	54.3	4.9	57.5	3.4	56.5	6.7	62.3	12.5
Massachusetts	39.1	22.4	43.6	23.6	46.1	32.3	67.1	41.7
Michigan	39.8	3.9	54.7	5.8	44.8	5.4	57.7	7.8
Minnesota	98.3	34.2	98.4	35.6	97.0	37.4	97.8	39.0
Mississippi	NA	NA	NA	NA	91.5	35.9	96.7	39.8
Missouri	68.7	16.7	68.9	18.6	71.5	18.5	76.9	24.1
Montana	87.4	2.0	90.4	1.7	88.7	2.2	90.2	2.1
Nebraska	64.8	14.4	64.4	34.1	61.4	16.1	68.2	20.5
Nevada	63.1	7.0	73.2	10.2	61.0	9.9	65.7	7.4
New Hampshire	88.1	47.1	87.0	51.4	90.7	55.4	91.6	75.1
New Jersey	59.0	44.0	55.6	26.5	60.8	26.3	56.5	28.5
New Mexico	53.2	18.3	53.5	18.5	43.1	8.1	59.5	10.9
New York	44.0	7.8	49.6	17.7	49.9	7.2	54.9	8.5
North Carolina	84.4	24.2	84.6	20.4	97.5	40.8	89.3	21.7
North Dakota	68.8	28.1	46.5	34.6	80.8	28.9	88.7	36.5
Ohio	48.4	2.0	46.5	2.0	R49.2	R1.9	58.0	3.2
Oklahoma	73.6	3.0	79.0	3.8	79.2	2.1	82.0	4.1
Oregon	98.3	12.4	98.3	13.8	98.1	17.3	98.5	16.7
Pennsylvania	R56.7	12.5	54.5	10.8	54.7	13.1	48.0	13.3
Rhode Island	67.9	39.6	71.1	41.7	72.4	48.1	80.8	48.5
South Carolina	96.4	R82.2	99.9	R89.1	91.0	89.0	100.0	87.0
South Dakota	72.1	12.7	78.3	12.0	83.7	10.7	80.7	17.3
Tennessee	80.4	19.8	80.7	24.4	NA	NA	86.7	29.6
Texas	52.3	14.1	50.6	14.2	56.6	19.1	56.5	18.1
Utah	71.7	7.9	72.8	8.2	77.0	9.4	78.8	9.0
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	64.6	4.9	62.9	5.5	65.3	8.1	72.2	6.5
Washington	NA	NA	NA	NA	NA	NA	80.7	21.0
West Virginia	21.6	11.2	23.2	11.8	29.1	11.3	43.8	11.4
Wisconsin	53.8	21.3	66.1	20.4	58.8	19.9	75.5	27.6
Wyoming	75.8	2.1	28.8	2.1	52.1	1.9	77.8	1.8
Total	R56.3	R13.9	R58.6	R14.1	R60.2	R15.9	63.8	16.6

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	April		March		February		January	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	59.3	17.3	76.2	17.9	79.7	19.5	77.7	17.7
Alaska	R56.9	98.8	R57.5	98.6	R58.8	97.9	R60.2	97.1
Arizona	83.8	20.2	86.5	20.1	87.8	22.6	87.4	18.2
Arkansas	93.5	10.9	94.9	12.1	96.6	13.6	96.1	12.9
California	51.6	10.6	54.5	11.0	58.5	11.3	58.0	11.3
Colorado	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut	87.1	68.2	87.0	68.2	90.2	78.8	90.1	76.0
Delaware	100.0	35.6	100.0	32.7	100.0	34.0	100.0	28.8
District of Columbia	100.0	—	59.9	—	62.8	—	67.9	—
Florida	97.8	7.3	97.0	7.1	96.6	8.7	96.1	9.1
Georgia	87.2	15.9	88.9	15.7	92.7	21.1	93.7	20.0
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	86.1	2.1	87.8	2.1	89.7	2.2	87.8	1.9
Illinois	53.1	8.4	54.4	10.3	54.3	9.8	62.0	14.6
Indiana	82.1	10.6	86.5	12.7	93.0	19.8	93.7	20.1
Iowa	90.3	7.2	88.5	7.4	89.4	7.2	90.3	9.6
Kansas	66.1	10.8	60.1	10.7	65.7	11.6	86.2	8.1
Kentucky	88.2	14.9	89.6	15.5	90.8	19.4	91.9	22.1
Louisiana	98.1	7.6	98.6	10.7	98.4	8.6	97.9	9.5
Maine	100.0	91.3	100.0	91.8	100.0	100.0	100.0	100.0
Maryland	76.8	1.6	79.8	17.3	82.8	14.7	84.5	2.8
Massachusetts	72.2	38.5	70.9	34.4	67.3	36.8	67.3	34.3
Michigan	65.3	10.4	66.4	12.8	69.4	14.2	69.2	14.0
Minnesota	98.0	41.6	99.0	42.2	98.7	45.0	98.6	37.3
Mississippi	92.4	35.4	95.8	36.5	96.3	37.6	96.9	38.4
Missouri	80.7	16.7	83.9	27.3	79.9	19.5	86.3	28.3
Montana	91.1	4.5	90.4	4.1	93.0	4.1	90.9	4.4
Nebraska	72.3	17.1	70.8	20.2	87.9	25.6	77.6	27.3
Nevada	69.2	8.0	78.1	7.3	79.7	R9.1	77.2	8.3
New Hampshire	92.0	62.3	94.0	53.6	99.1	52.1	98.8	44.2
New Jersey	64.0	36.9	68.5	30.3	93.5	36.0	70.6	35.9
New Mexico	58.1	2.8	70.5	3.9	72.5	2.1	74.0	19.4
New York	60.6	9.1	63.4	9.9	65.8	10.0	66.3	11.8
North Carolina	87.5	22.4	91.6	30.2	95.9	39.6	100.0	90.1
North Dakota	91.9	39.4	91.4	59.4	93.9	49.5	93.4	43.3
Ohio	64.8	3.3	69.2	5.5	68.5	5.6	72.5	8.4
Oklahoma	86.3	3.7	88.1	5.9	90.5	8.7	90.7	7.4
Oregon	98.5	R20.3	98.8	R21.0	98.9	R22.5	98.8	R19.0
Pennsylvania	64.7	14.1	64.3	15.4	69.8	14.9	69.3	18.9
Rhode Island	88.5	55.8	82.2	61.7	91.7	45.9	89.6	38.1
South Carolina	95.2	77.7	97.4	80.3	97.9	78.2	100.0	86.8
South Dakota	85.7	22.6	86.3	26.7	85.7	30.4	86.9	31.4
Tennessee	90.4	28.1	NA	NA	92.5	28.7	94.0	35.9
Texas	59.2	20.1	60.5	17.3	68.1	17.1	71.1	19.2
Utah	83.8	9.2	83.0	6.7	87.2	10.8	86.2	10.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	72.6	12.2	77.0	13.2	81.6	6.8	87.5	R7.9
Washington	83.1	26.8	86.0	27.3	86.7	26.8	87.8	26.7
West Virginia	49.6	7.1	60.3	19.7	67.8	14.8	67.8	14.4
Wisconsin	81.8	25.6	87.4	34.0	87.3	35.9	88.8	37.6
Wyoming	62.1	1.9	74.0	1.8	82.1	1.9	85.0	1.5
Total	R70.8	R16.9	R73.0	17.4	76.9	17.7	R77.9	19.4

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

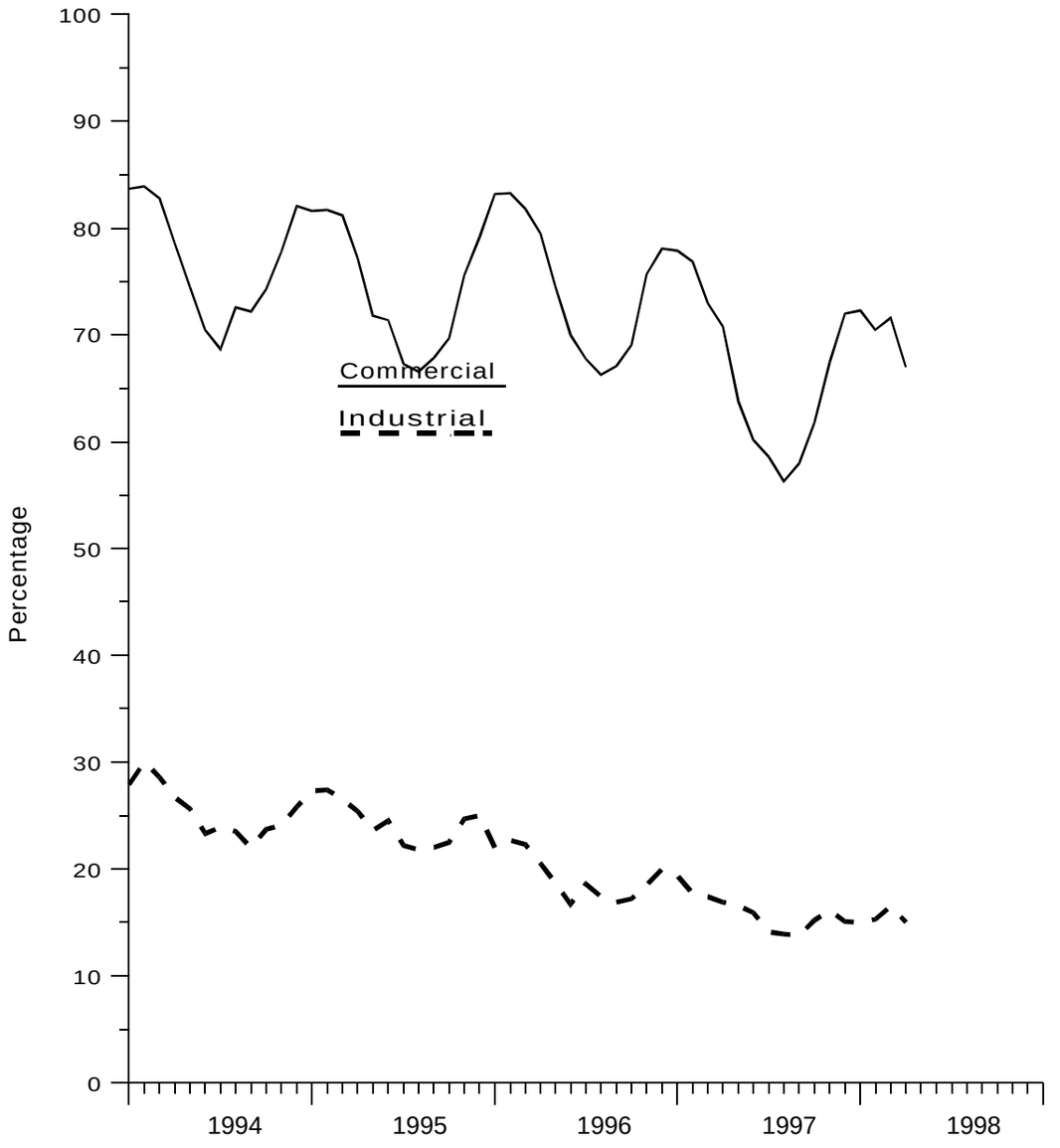
State	1996							
	Total		December		November		October	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	81.1	22.6	80.7	22.4	73.2	22.6	71.2	20.4
Alaska	63.4	64.3	61.8	68.0	58.2	71.3	54.2	64.8
Arizona	85.2	19.7	84.1	19.9	84.1	18.2	83.2	16.8
Arkansas	95.0	13.3	95.7	13.8	94.1	13.6	90.2	13.6
California	54.9	11.2	56.1	9.9	57.9	10.8	44.1	9.3
Colorado	93.2	7.4	94.3	7.1	92.8	8.3	89.1	9.7
Connecticut	87.0	84.6	87.9	80.1	84.0	74.8	81.3	71.9
Delaware	100.0	37.3	100.0	30.8	100.0	32.5	100.0	30.7
District of Columbia	70.5	—	65.3	—	55.1	—	48.0	—
Florida	97.1	13.4	96.1	12.5	97.0	11.1	97.4	12.2
Georgia	94.1	32.2	93.2	31.6	92.2	26.7	90.6	28.9
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	86.6	1.4	87.6	2.6	84.9	0.5	77.3	1.7
Illinois	53.9	13.7	56.1	22.5	53.0	13.7	48.8	8.6
Indiana	96.3	16.6	97.4	21.4	96.1	16.3	91.5	11.7
Iowa	87.7	9.0	87.2	11.7	86.6	18.4	81.8	9.8
Kansas	71.7	7.7	71.6	8.3	82.4	6.9	70.0	9.2
Kentucky	90.8	27.1	91.9	24.1	88.9	21.5	88.9	20.9
Louisiana	98.3	10.6	98.0	11.3	98.3	NA	98.6	NA
Maine	100.0	91.0	100.0	90.2	100.0	91.5	100.0	91.3
Maryland	91.9	11.7	93.2	19.7	92.2	2.1	87.3	3.7
Massachusetts	74.7	41.9	68.9	33.8	62.5	45.3	69.5	39.6
Michigan	66.9	12.5	70.2	15.8	67.2	12.7	55.8	8.1
Minnesota	96.2	41.3	95.6	44.5	94.8	44.1	92.4	41.2
Mississippi	97.4	41.7	96.9	44.1	96.7	44.8	96.0	39.1
Missouri	82.2	24.7	84.6	33.1	78.6	27.7	69.3	17.0
Montana	91.5	3.4	92.7	4.3	91.6	4.4	87.5	2.8
Nebraska	70.0	20.4	76.6	23.5	68.6	23.3	40.3	15.2
Nevada	74.2	7.2	74.9	7.8	70.8	7.4	64.0	5.2
New Hampshire	96.9	55.4	96.1	45.4	93.6	59.3	94.3	53.7
New Jersey	73.3	53.6	70.2	35.5	69.4	52.7	67.2	48.2
New Mexico	64.7	3.5	71.8	13.3	68.5	4.8	63.5	2.6
New York	77.0	14.7	NA	13.1	NA	11.4	NA	11.3
North Carolina	96.5	59.4	99.0	91.6	92.0	49.7	85.7	26.7
North Dakota	88.0	26.5	91.0	43.9	89.7	49.6	79.9	36.2
Ohio	71.8	7.4	74.0	10.0	72.4	7.8	68.5	3.7
Oklahoma	84.5	6.6	87.6	7.1	82.1	7.6	73.0	4.7
Oregon	98.3	18.0	98.6	16.0	98.3	14.4	97.0	14.1
Pennsylvania	70.4	18.5	61.0	22.3	63.3	16.6	59.7	13.5
Rhode Island	91.8	16.9	89.1	12.4	87.3	17.4	66.5	18.3
South Carolina	99.0	85.8	100.0	89.3	97.4	85.8	96.4	83.4
South Dakota	82.7	24.6	82.8	23.5	80.6	24.2	72.9	10.4
Tennessee	94.3	47.0	95.3	42.8	92.8	40.6	87.3	45.0
Texas	83.5	20.2	87.1	17.5	84.2	16.5	NA	20.2
Utah	81.9	9.0	84.4	9.7	81.2	9.3	79.5	9.4
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	85.3	18.0	88.1	22.1	84.8	21.4	74.3	11.1
Washington	85.9	24.4	87.4	27.2	84.6	22.2	82.7	19.8
West Virginia	56.3	14.3	71.3	14.4	54.5	14.8	43.4	13.3
Wisconsin	91.6	36.4	91.8	34.5	90.9	34.6	87.1	29.9
Wyoming	85.9	2.9	69.0	3.1	81.1	0.8	70.5	0.9
Total	77.6	19.4	78.1	20.0	75.7	18.5	69.1	17.2

R = Revised Data.
NA = Not Available.
— = Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1994-1998



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook.*

For production, total supply and disposition, and storage data (Tables l, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual.* Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for nonhydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Enery, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Pr*eliminary Monthly Data - Imports*

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual.*

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual.* Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C, "Statistical Considerations," for a detailed explanation off sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.
- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data
Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual.* Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual.*

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual.* Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual.*

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or "dome" formations), depleted fields (depleted reservoirs in oil and / or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability

is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

A preliminary estimate of the U.S. gas price is made each month based on the change in the production-weighted gas price from five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas. Gas prices for these five States are used because both their gas production and value represent a substantial sample of the U.S. gas production and value (roughly 50 percent), and their prices are readily available and provide a consistent series. The latest preliminary U.S. gas price estimate is calculated by multiplying the preliminary U.S. gas price estimate for the prior month by the ratio of the five States' gas price for the latest month to that of the prior month. This estimate replaces the initial gas price estimate.

Final Monthly Data

Preliminary monthly gas price data for Kansas, Mississippi, New Mexico, Oklahoma, and Texas are replaced by final monthly data that are adjusted to match the annual prices published in the *Natural Gas Annual* for each State. A revised set of the monthly U.S. gas price estimates are derived based on the monthly change in the production-weighted prices for these five States and adjusted to match the U.S. gas price published in the Natural Gas Annual.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual.* For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual.*

P*reliminary Monthly Data*

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply / disposition.

Note 10. Heating Degree-Days

Degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmpospheric Administration. The information published in the Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations arond the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home cutomers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and four monthly surveys.

The annual reports are the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines, and the Form EIA-627, a voluntary survey completed by energy or conservation agencies in the gas-producing States.

The monthly reports include two surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and/or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1996 for report year 1995 totaled 1,991 questionnaire packages. To this original mailing, 11 names were added and 61 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,941 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents followup, 1,911 responses were entered into the data base, and there were 30 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual.*

Form EIA-895, "Monthly Quantity of Natural Gas Report"

Survey Design

In 1996, an annual schedule was added to the Form EIA-895 to replace the Form EIA-627. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." In 1994, the IOGCC decided to discontinue collection of their form. All gas producing States are requested to report on the Form EIA-895; a voluntary report. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627. This form was designed by EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. The form was redesigned in 1990 to collect monthly breakdowns of all annual data elements. Data are not considered proprietary. It was also designed to avoid duplication of effort in collecting production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period. Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Summary of Data Requirements

The Form EIA-895 monthly schedule consists of nine questions on one page, and requires volumetric information on gross production (gas and oil wells individually), gas used for repressuring, gas vented and flared, nonhydrocarbon gases removed, natural gas used as fuel on leases, marketed production, value based marketed production and the value in dollar amount of the marketed production.

Form EIA-895 annual schedule collects data on the monthly and annual production volume of natural gas (including gross withdrawals from both gas and oil wells); volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on leases; marketed production; the value of marketed production; and the number of producing gas wells.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual.*

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 are a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/ FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.
At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 103 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural

Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.
Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different.

Prior to 1995, the Form FPC-14 was filed annually by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export was originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of 382 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors--residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata--companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors--the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value ($C_{.j}$) were included in the certainty stratum. The formula for $C_{.j}$ was:

$$C_{.j} = \frac{X_{.j}}{2n} \qquad (1)$$

where:

$C_{.j}$ = cutoff value for consumer sector j,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j,

$X_{i.}$ = the sum within State of annual gas volumes for company i,

$X_{.j}$ = the sum within State of annual gas volumes in consumer sector j,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors ($X_{i.}$). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n\,\frac{X2}{X_{..}} \qquad (2)$$

where:
m = the sample size for the noncertainty stratum within a State,
X2 = the sum within State of the $X_{i.}$ for all companies in the noncertainty stratum.
Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using $(I = \frac{X2}{m})$. A uniform random number R was selected between zero and I. The first sampled company was the first company on the list to have a cumulative measure of size greater than R. The second company selected was the first company on the list to have a cumulative measure of size greater than R + I. R + I was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X2 was the sum within State of the $X_{i.}$ for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.
Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled.
The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_j}{Y'_j} \quad (3)$$

where:

Y_j = the sum within State of annual gas volumes in consumer sector j for all companies,

Y'_j = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_j = y_j \times E_{vj} \quad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector j,
y_j = the sum within State of reported monthly gas volumes in consumer sector j.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.
The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V'_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.
The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.
Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{y_{jt}}{y_{j}t-1} \quad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

y_{jt} = gas volume reported by companies in the State stratum for report month t,

$y_{j}t-1$ = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual.*
The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.
Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V^{*}_{jm} = V_{jm} + \left[(V_{ja} - V'_{jm})\left(\frac{V_{jm}}{V'_{jm}}\right) \right] \qquad (6)$$

where:

V^{*}_{jm} = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,
V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate.
The formula for revising the estimated revenue is:

$$R^{*}_{jm} = R_{jm} + \left[(R_{ja} - R'_{jm})\left(\frac{R_{jm}}{R'_{jm}}\right) \right] \qquad (7)$$

where:

R^{*}_{jm} = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues.
Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of nonsampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^{H} \left[N_h^2 \frac{\left(1 - \frac{n_h}{N_h}\right)}{n_h (n_h - 1)} \left(\sum_{i=1} (y_i - T x_i)^2 \right) \right] \qquad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h
n_h = the sample size in stratum h
y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Reliability of Monthly Data

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, April 1998

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	432	239	487	694	0.46	0.42	0.56
Alaska	0	0	0	0	—	—	—
Arizona	89	25	0	92	0.02	0.03	—
Arkansas	0	0	0	0	—	—	—
California	722	119	2,905	2,996	0.06	0.10	0.24
Colorado	NA	NA	NA	NA	NA	NA	NA
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	205	261	1,201	1,246	1.05	0.20	0.21
Georgia	552	4,332	2,357	4,963	0.07	2.21	0.28
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	1,567	2,477	519	2,977	0.41	0.84	0.48
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	141	477	171	526	0.16	0.07	0.23
Kansas	13,193	10,506	12,689	21,106	0.58	1.54	8.82
Kentucky	286	331	1,323	1,394	0.18	0.34	4.45
Louisiana	4,237	1,069	4,041	5,952	6.53	2.36	0.02
Maine	0	0	0	0	—	—	—
Maryland	9	16	92	93	0.01	0.01	0.53
Massachusetts	333	209	1,016	1,089	0.07	0.09	0.63
Michigan	0	0	0	0	—	—	—
Minnesota	1,727	643	545	1,921	0.49	0.20	0.09
Mississippi	NA	NA	NA	NA	NA	NA	NA
Missouri	318	207	265	463	0.18	0.16	2.95
Montana	10	8	0	13	0.03	0.03	—
Nebraska	130	28	687	700	0.07	0.14	0.06
Nevada	0	0	0	0	—	—	—
New Hampshire	0	0	0	0	—	—	—
New Jersey	0	0	0	0	—	—	—
New Mexico	504	398	709	957	0.88	0.96	—
New York	5,589	3,261	4,094	7,657	0.08	0.07	0.19
North Carolina	316	81	197	381	0.01	0.01	0.05
North Dakota	0	0	0	0	—	—	—
Ohio	2,032	363	1,134	2,355	0.47	0.19	1.36
Oklahoma	1,328	693	889	1,742	0.89	1.06	0.51
Oregon	NA	NA	NA	NA	NA	NA	NA
Pennsylvania	NA	NA	1,867	NA	NA	NA	0.05
Rhode Island	NA	NA	0	NA	NA	NA	—
South Carolina	227	24	204	306	0.39	0.16	0.09
South Dakota	0	0	0	0	—	—	—
Tennessee	2,774	1,759	1,835	3,762	3.45	2.81	1.54
Texas	162	5,721	8,933	10,609	0.05	1.53	0.24
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	120	755	509	919	0.30	0.17	0.06
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	328	1,805	68	1,836	8.42	2.26	2.78
Wisconsin	1,524	1,386	499	2,120	0.42	0.32	0.33
Wyoming	18	117	NA	NA	0.17	0.34	NA
Total	16,425	14,041	17,892	28,054	0.24	0.23	0.23

NA = Not Available.
— = Not Applicable.
Source: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1995*, DOE/EIA-0131(95), November 1996.
- *Natural Gas Annual 1993 Supplement: Company Profiles*, DOE/EIA-0131(93/S), February 1995.
- *Natural Gas 1996 Issues and Trends*, DOE 0560(96), December 1996.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Natural Gas 1995: Issues and Trends*, DOE/EIA-0560(95), November 1995.
- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report*, DOE/EIA-0216(95)/Advance Summary, October 1996.
- *Annual Energy Review 1995*, DOE/ EIA-0384(95), July 1996. Published annually.
- *Annual Report to Congress 1995 DOE/ EIA-01733(95), July 1996. Published annually*.
- *Annual Energy Outlook 1996*, DOE/ EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

- *The Value of Underground Storage in Today's Natural Gas Industry*, DOE/EIA-0591, March 1995.
- *Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995*, DOE/EIA-0542(95), July 1994.
- *Largest U.S. Oil and Gas Fields*, DOE/EIA-TR-0567, August 1993.
- *Energy Policy Act Transportation Rate Study*, DOE/EIA-0571, October 1993.
- *Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates*, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(95), January 1996.
- *Oil and Gas Field Code Master List, 1995*, EIA-0370(95), December 1996.

Feature Articles

March 1995

The Comparability of Resource and Reserve Data for Crude Oil, Natural Gas, Coal, and Uranium

(Clarifies which terms are equivalent among the four major energy minerals in the United States.)

July 1995

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

June 1996

Natural Gas Industry Restructuring and Data Collection

(Discusses how restructuring of the natural gas industry has impacted the natural gas data collection efforts.)

July 1996

Revisions to Monthly Natural Gas Data
(Discusses the revision errors for natural gas data.)

November 1996

U.S. Natural Gas Imports and Exports - 1995

(Contains final 1995 data on all U.S. imports and exports of natural gas.)

December 1996

Crosswell Seismology -- A View from Aside

(Discusses crosswell seismology and its geologic and economic implications for the domestic oil and gas industry.)

May 1997

Restructuring Energy Industries: Lessons from Natural Gas

(Compares and contrasts the natural gas and electric power industries.)

July 1997

Intricate Puzzle of Oil and Gas "Reserves Growth"

(Discusses the factors that affect ultimate recovery estimates of a field or reservoir.)

August 1997

Natural gas Residential Pricing Developments During the 1996-97 Winter

(Discusses key factors that affect pricing patterns, highlights the effects of weather, utilization patterns of natural gas storage, and pricing mechanisms used in natural gas markets.)

December 1997

Recent Trends in Natural Gas Spot Prices

(Focuses primarily on conditions and developments in the East Consuming Region and their connection to prices at the Henry Hub in the Producing Region.)

March 1998

EIA Corrects Errors in EIA's Drilling Activity Estimates Series

(Discusses and corrects errors in EIA's monthly and annual estimates of oil and gas drilling activity.)

Special Focuses

January 1997

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity in the lower 48 States from 1985 and 1996 and project this capacity for 1996 and 1997.)

Outlook for Natural Gas Through 2015

(Presents an outlook for natural gas through 2015.)

August 1997

Worldwide Natural Gas Supply and Demand And the Outlook For Global LNG Trade

(Focuses on natural gas into the next century with emphasis on world natural gas supply and demand to 2015.)

September 1997

Advance Summary: U.S. Crude Oil, Natural Gas, and Natural gas Liquids Reserves, 1996 Annual Report - Advance Summary

(Focuses on proved reserves of domestic crude oil, natural gas, and natural gas liquids.)

May 1998

Deliverability on the Interstate Natural Gas Pipeline System

(Examines the capability of the interstate pipeline network to move gas to various U.S. markets and discusses changes occurring since 1990.)

Special Reports

March 1997

Natural Gas Analysis and Geographic Information Systems

(Explores how geographic information system techniques and methodologies are being used by the Energy Information Administration.)

April 1997

Natural Gas Pipeline and System Expansions

(Examines recent expansions to the North American natural gas

Natural Gas 1996: Highlights

(Reviews data for 1996 based on Energy Information Administration surveys.)pipeline network.)

July 1997

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

U.S. Natural gas Imports and Exports - 1996

(Contains final 1996 data on all U.S. imports and exports of natural gas.)

September 1997

U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed

(Examines recent and proposed expansions of underground natural gas storage capacity and deliverability in the United States as of September 1, 1997.)

October 1997

Comparison of Natural Gas Storage Estimates from the EIA and AGA

(Compares EIA and AGA estimates from January 1994 through July 1997.)

April 1998

Natural Gas 1997: A Preliminary Summary

(Reviews data for 1997 based on Energy Information Administration surveys.)

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics:				
Natural Gas Production	1, 2, 3	Monthly: Annual:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119
		Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Extraction Loss	1	Monthly: Annual:	EIA computations Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202) 586-6303
Supplemental Gaseous Fuels	2	Monthly: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202) 586-6303
Imports and Exports	2	Monthly: Annual:	EIA computations Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Linda Cook (202) 586-6306
Price:				
City Gate, Residential, Commercial, and Industrial	4	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202) 586-6106
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202) 586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly:	Quaterly Natural Gas Import and and Export Sales and Price Report	Linda Cook (202) 586-6306
Producer Related Activities:				
Natural Gas Production	7,8	Monthly:	EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119

Underground Storage:	9, 10, 11 12, 13, 14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption:				
Deliveries to:				
Residential,	15	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Commercial,	16		Natural Gas Purchases and Deliveries	(202) 586-4790
Industrial,	17		to Consumers"	
Electric Utility,	18		Form FERC-423, "Cost and Quality	
All Consumers	19		of Fuels for Electric Power Plants"	
Average Price to:				
City Gate,	20	Monthly:	Form EIA-857, "Monthly Report of	Roy Kass
Residential,	21		Natural Gas Purchases and Deliveries	(202) 586-4790
Commercial,	22		to Consumers"	
Industrial,	23		Form FERC-423, "Cost and Quality	
Electric Utility	24		of Fuels for Electric Power Plants"	
Onsystem Sales	25	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric Administration	Patricia Wells (202) 586-6077
Highlights				Mary Carlson (202) 586-4749

Appendix F

Natural Gas Electronic Products

In addition to printed publications, the Energy Information Administration distributes information concerning the natural gas industry in a variety of electronic formats through several media. Two main types of products are available electronically: *viewable documents* that may be read or printed; and *post-processable files* that may be directly used as input to a computer application without additional keying and checking of data.

Viewable documents represent complete or selected sections of publications including text, tables and graphs. They may be as specific as single tables or as general as an entire publication. Post-processable documents on the other hand are either macro-level representations of information in published tables or micro-level respondent information representing responses on a specific nonconfidential survey.

The media used to distribute these electronic publications include: (1) The Energy Information Administration's Internet site (http://www.eia.doe.gov or ftp://ftp.eia.doe.gov); (2) Dial-in access through the Energy Information Administration's EPUB electronic bulletin board or through the Economic Bulletin Board of the Department of Commerce and the COGIS system; (3) The Energy Information Administration's quarterly CD-ROM(Info-Disk); (4) The Energy Information Admi- nistration's Fax on Demand System; and (5) diskettes.

	Internet	Dial-In	InfoDisk	Fax	Diskette
ANNUAL PUBLICATIONS					
Natural Gas Annual, Volume 1, 1994 Provides information on supply, and disposition of natural gas in the United States.Information is provided nationally, regionally, and by State for 1994.	V P		V P		P
Natural Gas Annual, Volume 2, 1994 Contains historical information about supply and disposition of natural gas at the national, regional, and State level as well as prices at selected points in the flow of gas from wellhead to burnertip.	P		P		P
Natural Gas 1995: Issues and Trends Addresses current issues affecting the natural gas industry and markets, and analyzes trends in the most recent natural gas data.	V		V		
Natural Gas 1994: Issues and Trends Provides an overview of the natural gas industry in 1993 and early 1994, focusing on the overall ability to deliver gas under the new regulatory mandates of the Federal Energy Regulatory Commission's Order 636.	V		V		
Oil and Gas Products List 1994-1995 Brief descriptions of the various information products prepared by the Office of Oil and Gas.	V		V		
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report 1994 1994 national and State estimates of reserves, reserve changes, and production, plus industry highlights.	V		V		
MONTHLY PUBLICATIONS					
Natural Gas Monthly, from September 1995 forward. Entire Publication in viewable format	V		V		

V=Viewable P=Post-Processable

	Internet	Dial-In	InfoDisk	Fax	Diskette
OTHER PUBLICATIONS					
Natural Gas 1995: Preliminary Highlights This Special Focus, which was featured in the April 1996 issue of the *Natural Gas Monthly*, presents events that affected the natural gas industry during 1995.	V	P		V	
Energy Policy Act Transportation Study: Interim Report on Natural Gas Flow and Rates (EPACT) Analysis of natural gas transportation rates and distribution patterns for the period from 1988 through 1994.	V		V		
Oil Production Capacity Expansion Cost for the Persian Gulf Quantifies the cost of expanding oil production capacity for the Persian Gulf based on geologic plays and fields rather than country-level economics. Development costs and volumes are estimated for the next 15 years.	V		V		
Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations 1990-1993 Cost of equipment and operation of oil and gas wells in the lower 48 States.	V		V		
Drilling Sideways- A Review of Horizontal Well Technology and the Domestic Application April 1993 report presenting salient aspects of current and near-future horizontal drilling and completion technology.	V		V		
International Oil and Gas Exploration and Development Compilation of country-level data and assessment of regional trends relating to upstream aspects of global oil and gas supply.	V		V		
Natural Gas Productive Capacity for the Lower 48 States 1984-1996 Analysis of monthly natural gas wellhead productive capacity.	V		V		
Natural Gas Productive Capacity for the Lower 48 States 1980-1995 Analysis of monthly natural gas wellhead productive capacity.	V		V		
Oil and Gas Field Code Master List Comprehensive listing of U.S. oil and gas field names as of November 1995.	V		V		
Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgysztan) Reservoir level assessments of oil and gas ultimate recovery in the former Soviet Union area.	V		V		
The Value of Underground Storage in Today's Natural Gas Industry Explores the significant and changing role of storage in the industry.	V		V		
U.S. Oil and Gas Development in the Early 1990's Analyses of the growing prominence of smaller energy companies in U.S. oil and gas production	V		V		
ANNUAL DATA					
Natural Gas Supply and Disposition, by State 1994	V P	V P		V	

V=Viewable P=Post-Processable

	Internet	Dial-In	InfoDisk	Fax	Diskette
Natural Gas Summary, United States by Year 1990-1994	V P	V P		V	
1994 Natural Gas Annual Volume 1 data Self-extracting file containing data (in comma-delimited format) that appear in the tables in Volume I of the 1994 *Natural Gas Annual*.	P		P		P
1994 Natural Gas Annual Volume 2 data Self-extracting file containing historical information (in comma-delimited format) found in the tables in Volume II of the 1994 *Natural Gas Annual*. Annual historical data at the national level are presented for 1930-1994. Annual information by State and region is presented for 1967-1994.	P		P		P
1993 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" for 1993.	P				P
1994 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" for 1994.	P				P
Data archive of historical reserves estimates for U.S. Crude Oil, Natural Gas, and Natural Gas Liquids. National, State, and State subregion data published in the reserves balance tables of *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves* from 1977 forward.	P				P
MONTHLY DATA					
Natural Gas Production, United States by Month 1989-forward	P	P		V	
Natural Gas Supply and Disposition, 1989-forward	P	P		V	
Natural Gas Imports and Exports 1989-forward	P	P		V	
Natural Gas Underground Storage: United States Total by Month 1989-forward	P	P		V	
Natural Gas Prices: United States Total by Month 1989-forward	P	P		V	
Natural Gas Consumption by Sector: United States Total by Month, 1989-forward	P	P		V	
SELF-EXTRACTING COMPRESSED DATA FILE ARCHIVES					
Natural Gas Consumption and Prices, for most recent 2-3 years	P	P			
Natural Gas Consumption and Prices, for 1984-1992	P	P			
OTHER REPORTS					
Natural Gas Weekly Market Update Analysis of current price, supply and storage data along with a two week snapshot of the weather in four distinct metropolitan areas.	V			V	

V=Viewable P=Post-Processable

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the termperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent: Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oi1 in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.